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EXPERIMENT IN VALIDATION OF TWO PERSONALITY TESTS IN MIDDLE GRADES

Submitted by

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(B. S. in Education, Boston College, 1939)

In partial fulfillment of requirements for the degree of Master of Education

1946

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CHAPTER I

INTRODUCTION AND REVIEW OF PREVIOUS RESEARCH



CHAPTER I

INTRODUCTION AND REVIEW OF PREVIOUS RESEARCH

Statement of Problem

The purpose of this study was to determine the validity of two tests - California Test of Personality and Aspects of Personality - which were designed for use in the middle grades and are rated by educators and psychologists as the best personality inventories at the present time.

That there is need of such a study cannot be denied when we read statements such as the following by Traxler:1/

"Probably the greatest single need in personality measurement at the present time is the need for extensive studies of the validity of existing instruments."

In his critical review of The California Test of Personality which is found in the 1940 Mental Measurements Yearbook, 2/Vernon tells us that:

"No evidence whatsoever is given of any correspondence between a pupil's scores and his actual behavior or other people's impression of his behavior."

And again on page 84 of the same volume we find S. J. Beck

^{1/} Traxler, A. E. "Measurement in the Field of Personality" Education 66:424-430 (March, 1946

^{2/} Buros, O. K. The Nineteen-Forty Mental Measurements Yearbook

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reiterating the shortcomings of a personality inventory in the following words:

"There is no report of validation of findings in individuals' inventories with study of the same individual by other methods. The defect is one which the author no doubt shares with much present-day study of personality."

Value of Personality Tests

If personality tests measure what they purport to measure, then we have on hand an effective tool in helping us to understand the "whole child" and the child as an "individual," the value of which no teacher can afford to underestimate.

As an outcome of extensive study on personality measurement, which disclosed the lack of tests of the inventory type suitable to the elementary school grades, Pintner and his co-workers constructed a measuring instrument which they call "Aspects of Personality." In justification of their study, Pintner tells us:

"That a child's adjustment of the school situation has much to do with his readiness to learn is quite obvious. Through a study of the personality of each of her pupils, a teacher becomes a better guide in the educational process. Such study makes for closer contact between teacher and child. Certain children must be encouraged and led along slowly. Others need to be challenged in order to motivate them to better work. The submissive child

^{1/} Pintner, R. et al. Aspects of Personality. World Book Co. Yonkers, New York, 1937

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needs to be encouraged. The nervous child requires special treatment. The introverted child needs to be made less sensitive and withdrawing. If the teacher but knew the personality assets or liabilities of each child, she could act accordingly. A good start in this direction may be accomplished through the use of a personality test of the inventory type."

Review of Research Definition of Term

It is the uniqueness of personality which makes it the despair as well as the joy of those who attempt to take its measure. Yet, as Thorndike has so aptly said, "whatever exists, exists in some amount and can be measured." Because of the difficulty in developing suitable techniques, the measurement of personality has lagged behind that in any other area of education. Even the meaning of personality is the subject of wide differences of opinion due to the inclusiveness of the term. Although Allport presents some fifty odd definitions of the term "personality" including the theological, sociological, and psychological ones, it is the following which he selected for use in his authoritative treatment of personality:2/

"Personality is the dynamic organization within the individual of those psychophysical systems

^{1/} Thorndike, E. L. Mental and Social Measurement. Teachers College, Columbia, New York, 1913

^{2/} Allport, G. W. Personality A Psychological Interpretation (See bib.)



that determine his unique adjustments to his environment."

Traxler tells us that:

"One's personality may be defined as the totality of his behavior in social situations."

In a study by Murphy and Jensen²/we find a note of disagreement:

"We do not believe that anyone today can seriously undertake to say that he knows what personality is."

Writing in the same vein, Douglas Spencer3/ says:

"No adequate theory as to the nature of personality has been established by quantitative method."

Approach to Personality Study

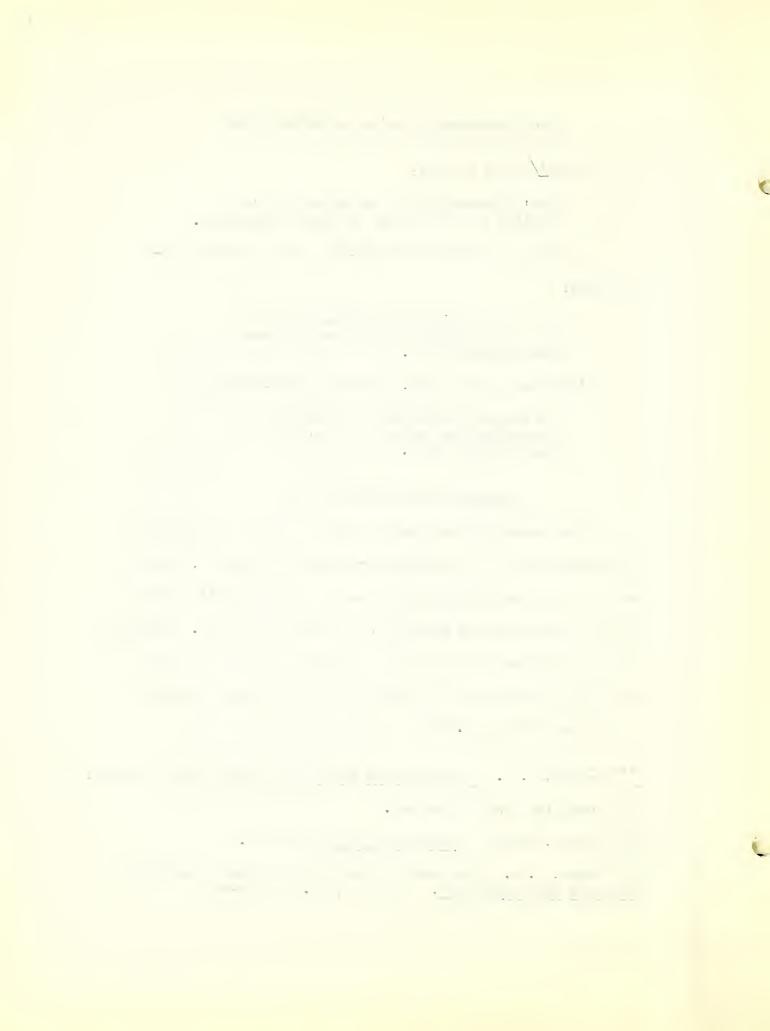
Since personality is usually defined in terms of how it is constituted and these component parts are called traits, it is easy to understand why the approaches to both personality study and its measurement are made through personality traits. "However, the mere enumeration of a person's traits and habits does not give us the person himself since it omits the essential aspect of organized structure."4

^{1/} Traxler, A. E. Measurement in the Field of Personality (See bib.)

^{2/} Murphy and Jensen (See bib.)

^{3/} Spencer, Douglas Fulcra of Conflict (See bib.)

^{4/} Vernon, P. E. "Can Total Personality Be Studied Objectively" Character and Personality. Volume II, No. 4 (1935-36)



To quote from Stagner:1/

"Personality is relative to a framework of reference and likewise personality studies are relative to the conditions under which they are made."

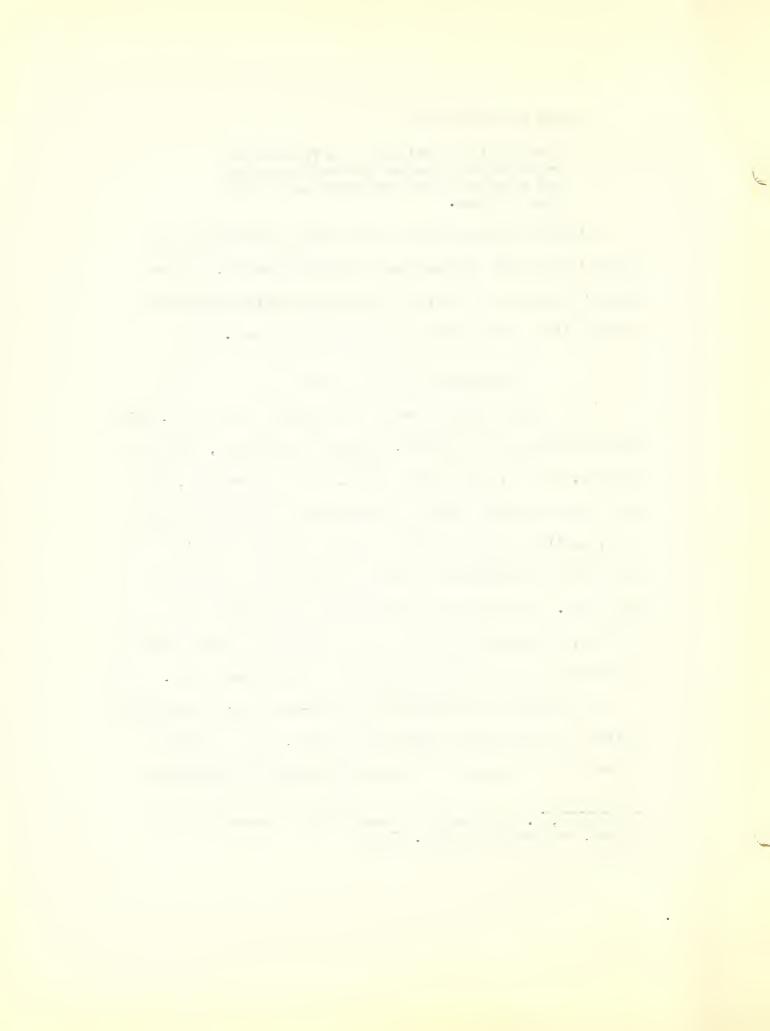
Although a consideration of the "whole" personality must always include both physical and intellectual traits, because they are measured by different techniques, physical traits will receive little or no attention in the present study.

Disadvantages of Personality Tests

Of the many legitimate methods of studying personality, which include records, the interview, laboratory experiment, clinical analysis, ratings, standardized tests, direct observation, and many others, we shall concern ourselves with standardized tests or personality ratings as they are called because of their adaptability to classroom use and to treatment by statistical techniques. No single method will reveal personality in its entirety, but personality ratings are becoming more widely used in education and are being employed with greater confidence.

The following disadvantages of Pencil-and-Paper Tests (stand-ardized tests and rating scales) are obvious, but they can be minimized by the teacher or tests administrator who recognizes

^{1/} Stagner, R. "Psychology of Personality" McGraw Hill Book Company, New York and London. 1937



their existence and acts accordingly:

- 1. Ease of falsifying the answers.
- 2. Misunderstanding of the meaning of a trait.
- 3. "Halo effect" or its opposite the "horned effect" which means the subjective tendency on the part of the marker or, in other words, the tendency to see things, not as they really are, but as they appear to be through the eyes of the marker.

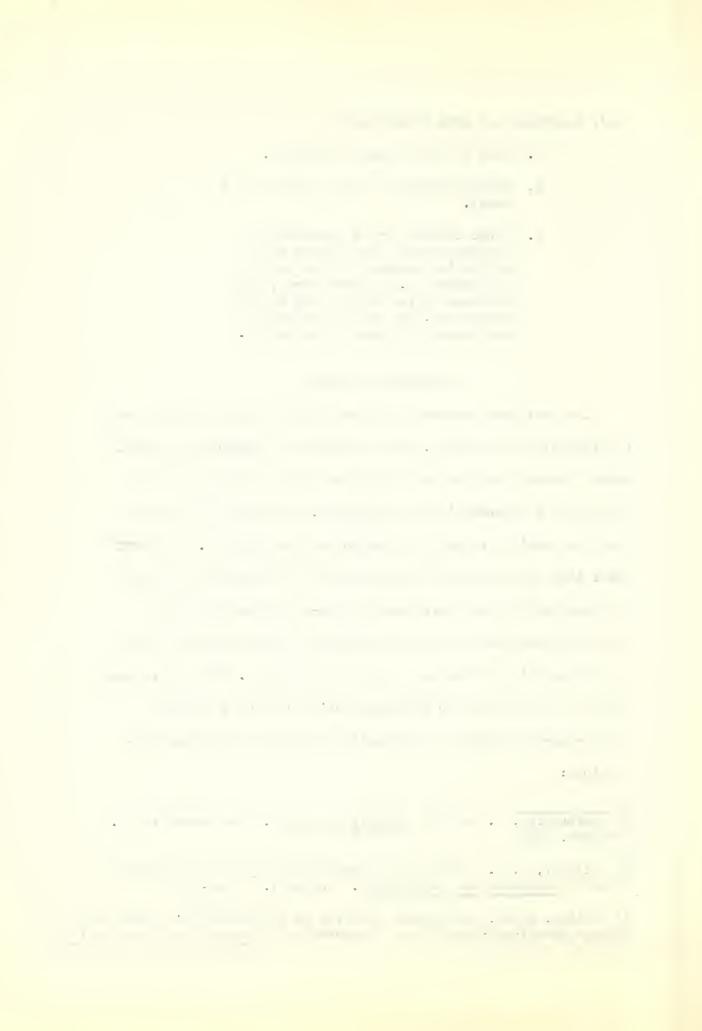
Objections Answered

The best known studies in regard to the first objection, that of falsifying the answers, have been made by Hartshorne and May whose findings point to the conclusion that honesty is a trait which is not inherent in the individual, but which is dependent upon the specific situation in which he finds himself. Allport feels that the best way to get around this difficulty is to make an honest effort to secure unstinted co-operation by assuring the individual that there are no right or wrong answers and that the outcome will not be used to his disadvantage. A more recent study on "The Ability to Influence One's Score on a Typical Pencil-and-Paper Test of Personality" offers the following conclusions:

^{1/} Hartshorne, H. and May Studies in Deceit. The Macmillan Co. New York, 1928

^{2/} Allport, G. W. "The Study of Personality by the Experimental Method" Character and Personality. Volume I. (1932-33)

^{3/} Kelley, Miles, and Terman "Ability to Influence Une's Score on a Typical Penciland Paper Test of Personality" Character and Personality



- 1. Subjects of both sexes are able to shift their scores.
- 2. Ability to shift scores is not correlated with age, intelligence, or
 scholastic achievement. It is suggested
 that such ability may be related to the
 subject's level of social adjustment or
 social intelligence.

To diminish the "halo effect" (subjective tendency on the part of the marker) Allport 1 suggests:

- 1. Specific warning against it.
- 2. Avoidance of haste and perfunctoriness in making ratings.
- 3. Averaging the ratings of several judges.

Some interesting findings have been reported by Adams 2/who claims that the factors influencing the reliability of judgment are:

- 1. Differences in persons being rated.
- 2. Differences in ability to judge.

He found the accurate judge of self somewhat more intelligent and more observing that the good judge of others. A good self-rater tends to be happier, less gloomy, less irritable, less liable to lose his head, more generous, more sympathetic, and more

Mallport, G. W. "Description of Personality" American Journal of Psychology (1945) Pp. 40 to 60

^{2/} Adams, H. F. "The Good Judge of Personality" Journal of Abnormal and Social Psychology (1927) 22: 171-182

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courageous than a good judge of others.

In his book called, "Fulcra of Conflict," Douglas Spencer describes an experiment which he planned and conducted in an effort to overcome this obstacle of subjectivity on the part of the marker. He took careful precautions to safeguard the identity of the subjects and to secure frankness. Each individual's report as to his own experience, behavior, or characteristics in regard to each variable were considered in relation to five variables or factors.

"These factors, assumed to constitute subjective components, concomitants, or contingencies of experience, are herein referred to for convenience as "the fulcra of conflict or complacency." As here used, the concept is defined as the subjective prop or support on which the evaluation of a given variable rests; the hinge on which its significance for conflict turns."

A Good Supplemental Device

Having admitted the limitations and shortcomings of the paperand-pencil method of personality testing, we now rise to its defense.

The measurement of adjustment is an extremely comprehensive task, we are told. In its broad sense, such measurement implies

^{1/} Spencer, Douglas Fulcra of Conflict. World Book Company. Yonkers-on-Hudson, New York. 1939. Pp. 89 and 90

^{2/} Greene, H. A. Jorgensen and Gerberich Measurement and Evaluation in the Elementary School. Longmans, Greene & Company. New York, 1942

4 0 le . a 2 d a . the use of all types of devices which will furnish information concerning the child and his backgrounds of heredity and environment. Symptoms of maladjustment may fairly readily be observed by the teacher who has insight into pupil behavior, but the determination of causes underlying maladjustment is often a task for the clinical psychologist. The importance of an awareness by the teacher of existent emotional maladjustments in his pupils should be apparent. Such recognition of maladjustments should be accompanied by evidence concerning their nature, and if possible, their causes. Adjustment inventories serve the first two purposes of (1) pointing out the existence of and (2) nature of existing maladjustments quite adequately in many instances, but they probably do not accomplish the third purpose, of discovering the causes of maladjustments.

In his recently published study of juvenile delinquency in the schools of Passaic, New Jersey, Kvaraceus devoted an entire chapter to a discussion of the school as a frustrating experience in the lives of many children. He says:

"In general, the school picture of the delinquent presents an unsatisfactory, unsuccessful, unhappy, and hence, extremely frustrating situation which precedes or accompanies undesirable behavior."

And again in a later chapter:

^{1/} Kvaraceus, W. C. Juvenile Delinquency and the School. World Book Company. Yonkers-on-Hudson, New York. 1945



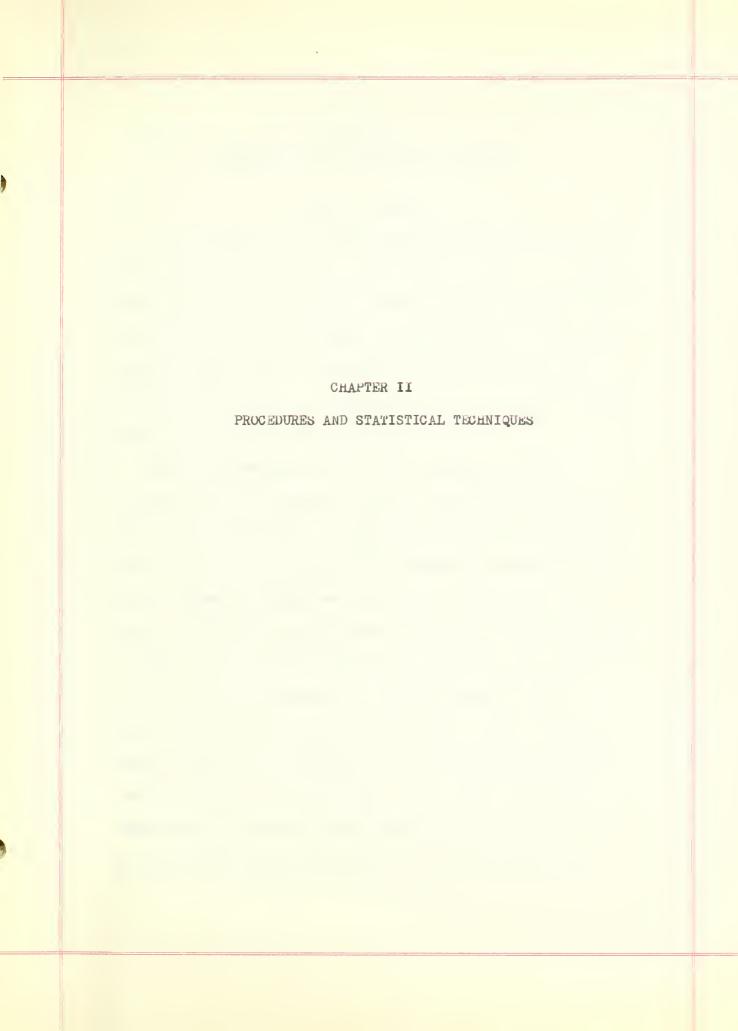
"Since delinquent behavior is the result of an interacting personality-environment situation which is usually characterized by frustrations in the home, school, neighborhood, or personality make-up itself, a scientific program of prevention and control demands a thorough study of the delinquent personality and the total environment."

Summary of Research

The review of previous research seems to suggest that:

- 1. There is great need of a better understanding of the "whole child."
- 2. If we are to make a serious attempt to adjust the school program to the individual child, we must use every means available to acquire a better understanding of the child's personality.
- 3. Although research in personality testing has lagged behind that in all other fields of educational and psychological measurement, personality tests and rating scales which have been standardized have some value as supplemental devices in the measurement of personality.
- 4. Due to insufficient data on the matter, we do not know how much value these tests have.
- 5. Educators seem to agree that there is need of further research on validation of personality tests.

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CHAPTER II

PROCEDURES AND STATISTICAL TECHNIQUES

CHAPTER II

PROCEDURES AND STATISTICAL TECHNIQUES

Scope of Problem

The children used in this experiment were a heterogeneous group of one hundred pupils - 61 boys and 39 girls - in grades four, five, and six of a public elementary school located near the heart of a large New England industrial city. Their socioeconomic status could be described as neither "superior" nor "inferior," but rather as a fluctuating matter depending largely upon prevailing business conditions.

With the permission of the school principal and the co-operation of two classroom teachers, the following testing program was carried out. One hundred boys and girls of grades four, five, and six were given the California Personality Test and the Pintner Inventory with the clear understanding that there are no right or wrong answers. Every child was encouraged to answer the way he felt about every question in the inventory. It is the opinion of the writer and the co-operating test administrators that, in the vast majority of cases, the answers given appeared to be in keeping with the child's personality as seen from the teacher's viewpoint. The credit for frank and honest replies is probably due to two factors (1) the age level (9 to 12) and (2) the informality with which the matter was



presented.

The questionaires used in this experiment were:

- California Test of Personality by Thorpe,
 Clark, and Fiegs
 Grades 4 9 Form 1
 Published by California Test Bureau
 Los Angeles 28, California
- 2. Aspects of Personality by Pintner et al Published by World Book Company Yonkers-on-Hudson, New York

In the critical analyses of these two tests, which is provided in the 1940 Mental Measurements Yearbook, Percival Symonds,

"The California Test of Personality would appear to be one of the most carefully prepared questionaires of this type."

And in the same volume, P. E. Vernon, Lecturer in Psychology at the University of Glasgow, says about Aspects of Personality:

"In most respects, the test seems to be a distinct advance on other personality inventories for children."

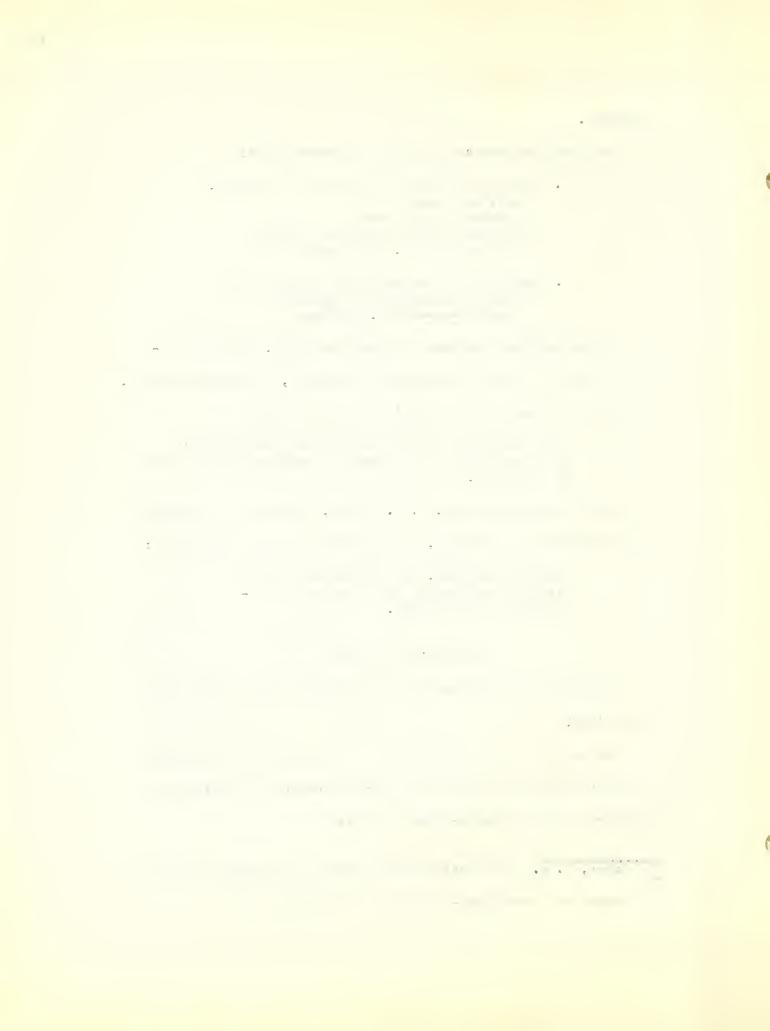
Reliability of Tests

How reliable are these tests and how was their reliability ascertained?

The authors of the California Test offer the following data based upon 334 cases using the split-half method of correlation corrected by the Spearman-Brown formula:2/

Buros, O. K. The Nineteen-Forty Mental Measurements Yearbook

2/ Manual of Directions - California Personality Test



		S. D. dist.	
	r	score	score
Total Adjustment	.933	15.2	3.7
Sec. 1. Self-Adjustment	.888	9.9	3.1
Sec. 2. Social Adjustm't	.867	7.6	2.6

Pintner and his associates offer the following reliability coefficients: 1/

TABLE 2

Odd-Even Stepped-Up Reliability Coefficients for Each of the Three Sections of the Aspects of Personality Inventory

Boys						Girls			
Age	N	I A-S	II I-E	III	Age	7.4	I A-S	II I-E	III
10 11 12	100 100 100	.690 .755 .742	.759 .624 .525	.911 .870 .811	10 11 12	100 100 100	.659 .759 .753	.599 .582 .590	.797 .821 .922

By the re-test method, the coefficients of correlation between the first and second administrations of A-S, E-I, and E sections were .65, .70, and .79 respectively

Validity

What validation data do the authors present? On consulting the manual which accompanies the California Personality Test, we find that the validity of the instrument depends upon four factors:

- A. Selection of items based upon a study of over 1,000 specific adjustment patterns or modes of response to specific situations which confront children.
- B. The Personality Components the obtained correlations among components emphasize

^{1/} Manual of Directions - Pintner's Aspects of Personality

the unity or "wholeness" of normal individuals.

- C. Test Item Disguise to prevent some children from painting self-portraits which are better than the originals.
- D. Limitations by a careful selection of items, it is hoped that a relatively short instrument is as reliable and useful as one of greater length.

Pintner and his associates used the following procedures in attempting to insure the validity of their questionaire:

- 1. Examination of current personality inventories
- 2. Authors' judgment
- 3. Internal consistency determined by the Clark Item Value and Biserial and methods

Since the validity of these inventories depends on factors intrinsic to the tests, its adequacy is open to question. The purpose of the present study is to test the validity by using criterion data.

A Brief Description of the Tests

The California Test of Personality is divided in two sections as follows:

- 1. Self Adjustment: Based on feelings of personal Security
- B. Ser
- B. Sense of Personal Wealth
 - C. Sense of Personal Freedom
 - D. Feeling of Belonging
 - E. Freedom from Withdrawing Tendencies
 - F. Freedom from Nervous Symptoms
- 2. Social Adjustment: Based on feelings of social security
- A. Social Standards
- B. Social Skills

A. Self-reliance



- 2. Social Adjustment: Based on feelings of social security
- C. Freedom from Anti-social Tendencies
- D. Family Relations
- E. School Relations
- F. Community Relations

By measuring the factors in Section 1, we are supposed to find out how the pupil thinks and feels about himself, while Section 2 is designed to reveal the way in which a pupil is adjusting in his social milieu - family, school, and community. We add the Self Adjustment and Social Adjustment scores to obtain the pupil's Total Adjustment. The emphasis in this test is upon the "wholeness" of the child's adjusting organizm. A profile chart is provided with each test which, when filled in with the scores obtained on each item of the test, is supposed to provide a personality picture of the child and to form the basis for guiding and assisting him in attaining better adjustment.

In Aspects of Personality, the authors have attempted to measure three highly important traits of personality and temperament. 1/

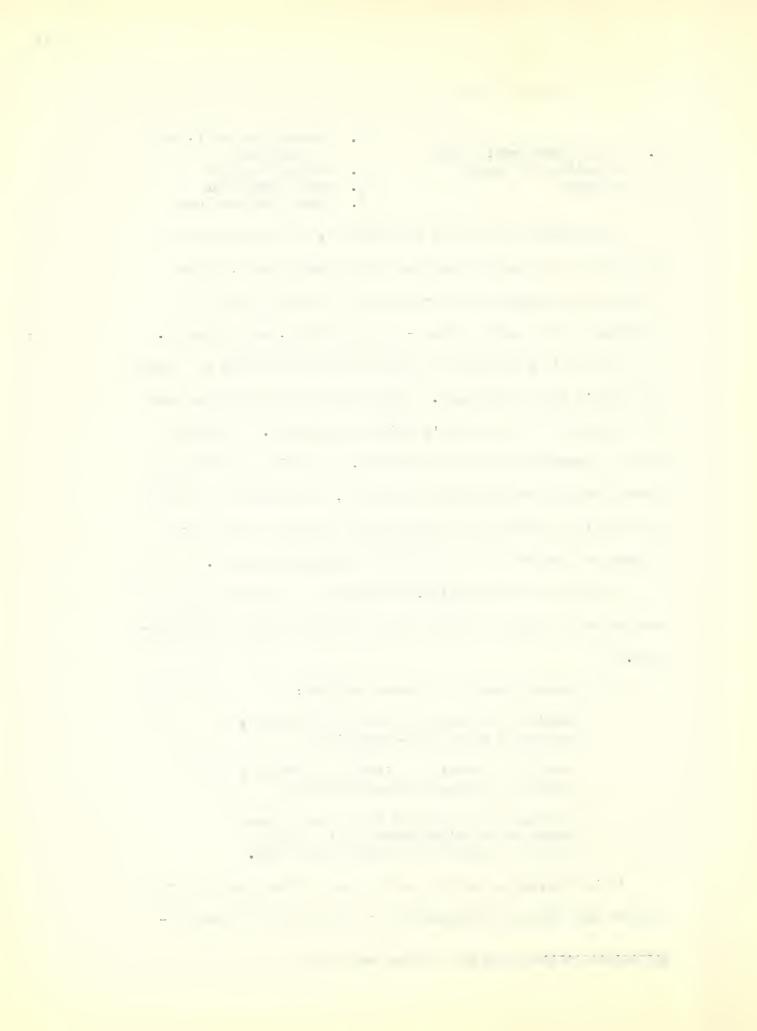
The inventory consists of three sections:

Section I contains 35 items and provides a measure of ascendancy-submission

Section II contains 35 items and affords a measure of introversion-extroversion

Section III contains 35 items plus 9 items which are non-significant and is designed to give a measure of emotional stability.

It is interesting to note and to bear in mind when comparing results that these two inventories do not measure the same per-



sonality traits. A chart compiled by Traxler indicates fiftysix aspects of personality which are measured on ten different
tests. No one aspect is included on more than three of the
inventories. Four traits - emotionality, home or family adjustment, introversion-extroversion, and social adjustment - appear in
three inventories which seems to indicate agreement on the part of
test authors that these four aspects are of more importance than
the traits which appear less often. Traxler tells us, "In no
other field of measurement do tests which are designed to measure
the same general area yield such varied results."

Criterion Data

Since the purpose of this study was to find out if these tests measure what they purport to measure, criterion data was necessary.

Before presenting it, however, the writer wishes to quote from rintner and Forlance.

"There is no generally accepted method for the validation of a psychological test. Intelligence tests have been correlated with school marks, educational achievement tests, teachers' ratings of intelligence, and similar standards. In the field of personality testing, the more or less objective standards of scholastic success cannot be used and so we are compelled to depend upon other less satisfactory criteria. . . . So, we have to resort to the classroom teacher for help in spite of the well-known unreliability of his

^{1/} Traxler, A. E. Measurement in the Field of Personality Education 66: 424-430 (March, 1946)

^{2/} Pintner and Forlano "Validation of Personality Tests by Outstanding Characteristics of Pupils" Journal of Education Psychology 30: 25-32 (January, 1939)

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ratings. This unreliability is partly due to the fact that an ordinary classroom teacher rarely knows the personality characteristics of all the children in his room and partly due to the difficulty of clearly defining the personality trait which is to be rated."

In this experiment, the following criteria were employed enabling the writer to study the extent to which the personality tests actually did differentiate between normal groups and those known or suspected of being deviates.

- 1. Intelligence Quotients derived from National Intelligence Tests - Scale A - Form 2
- 2. Metropolitan Achievement test scores Intermediate Battery - Partial
- 3. Report-card marks
- 4. Haggerty-Olson-Wickman Behavior Rating Schedule B
- 5. Sex
- 6. Broken Homes
- 7. Bi-Lingual Homes

Brief Description of Criterion Data and How It Was Procured

Although Behavior Rating Schedules have admitted defects, they nevertheless furnish us with a more objective instrument for measuring personality traits. The Haggerty-Olson-Wickman Behavior Rating Scale, Schedule B, consists of a graphic five-point rating scale for thirty-five traits which are divided into four groups - intellectual, physical, social, and emotional. Each trait has

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been assigned a position on a five-point scale and is weighted according to its predictive relation to the problem tendency score on Schedule A. (Schedule A was not used in this experiment) Extremes of a trait, (such as, Extremely Sluggish-Overactive), receive higher problem-weightings than intermediate positions. Total scores received on this rating scale denote freedom from problem tendencies, so that low scores represent slight deviations from the typical behavior of children and are more desirable than high scores. A rerating correlation of .86 and a split-half correlation of .92 are reported for elementary school children.

The 100 children in the experimental group were rated by their classroom teachers on the Haggerty-Olson-Wickman Behavior Rating Scale, Schedule B, in accordance with the instructions which appear on the first page of each copy. Sample question and directions follow:

Feeble-	Dull	Equal of	Bright	Brilliant
Minded	(4)	Average	(2)	(1)
(5)		Child on		
		Street		
		(3)		

- 1. Do not consult anyone in making your judgments.
- 2. In rating a person on a particular trait, disregard every other trait but that one. Many ratings are rendered valueless because the rater allows himself to be influenced by a general favorable or unfavorable impression that he has formed of the person.

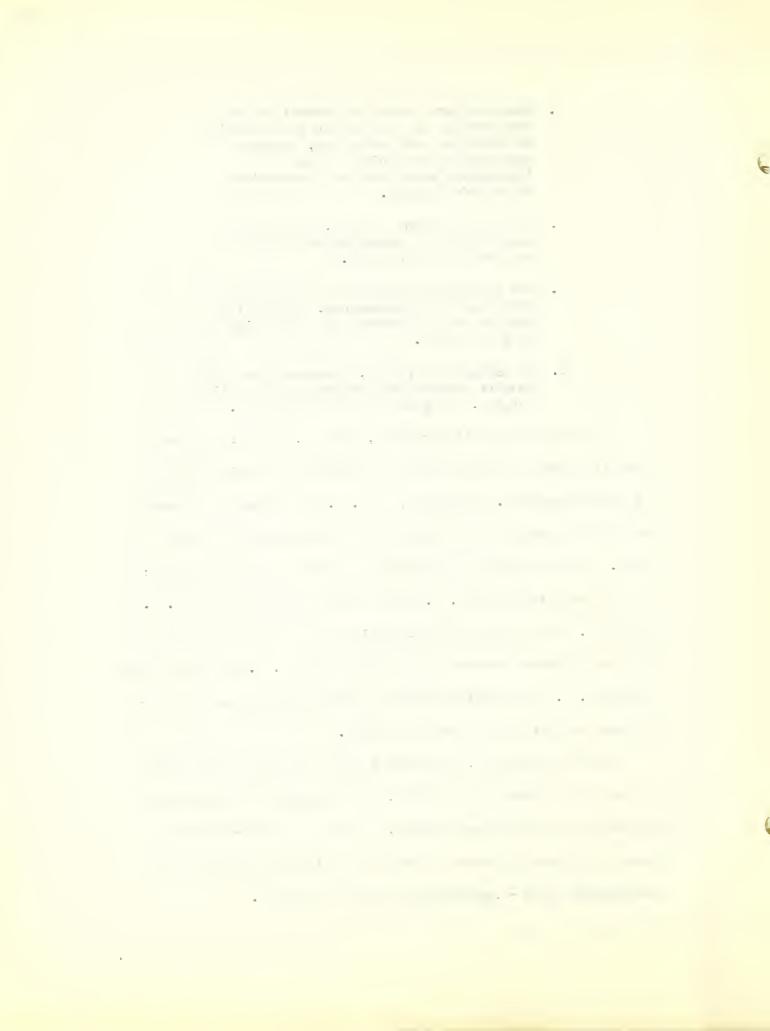
^{1/} Manual of Directions Haggerty-Olson-Wickman Behavior Rating Schedule B

- 3. When you have satisfied yourself as to the standing of this person in the trait on which you are rating him, indicate your rating by placing a cross (X) immediately above the most appropriate descriptive phrase.
- 4. If you are rating a child, try to make your ratings by comparing him with children of his own age.
- 5. The masculine pronoun (he) has been used throughout for convenience. It applies whether the person whom you are rating is male or female.
- 6. In making your rating, disregard the small numbers which appear below the descriptive phrases. They are for use in scoring.

The National Intelligence Test, Scale A, Form 2, had been given in Grade 4 of this particular school as a routine part of the testing program. Therefore, an I. Q. was already on record for all the pupils in this group and is the one used in this study. The experimental population was divided into two groups:

(1) Boys and girls with I. Q. 100 or above; (2) Those with I. Q. below 100. In a further effort to find out if the personality test distinguished between groups with a high I. Q. and those with a lower I. Q. the dividing line was pushed up to 110 and the population was again split into two groups.

Had time permitted, Achievement Tests would have been given to the entire group of 100 pupils, but since that appeared not to be feasible for practical reasons, a group of twenty-five fifth grade pupils were selected at random and given the Metropolitan Achievement Tests - Intermediate Battery (Partial).



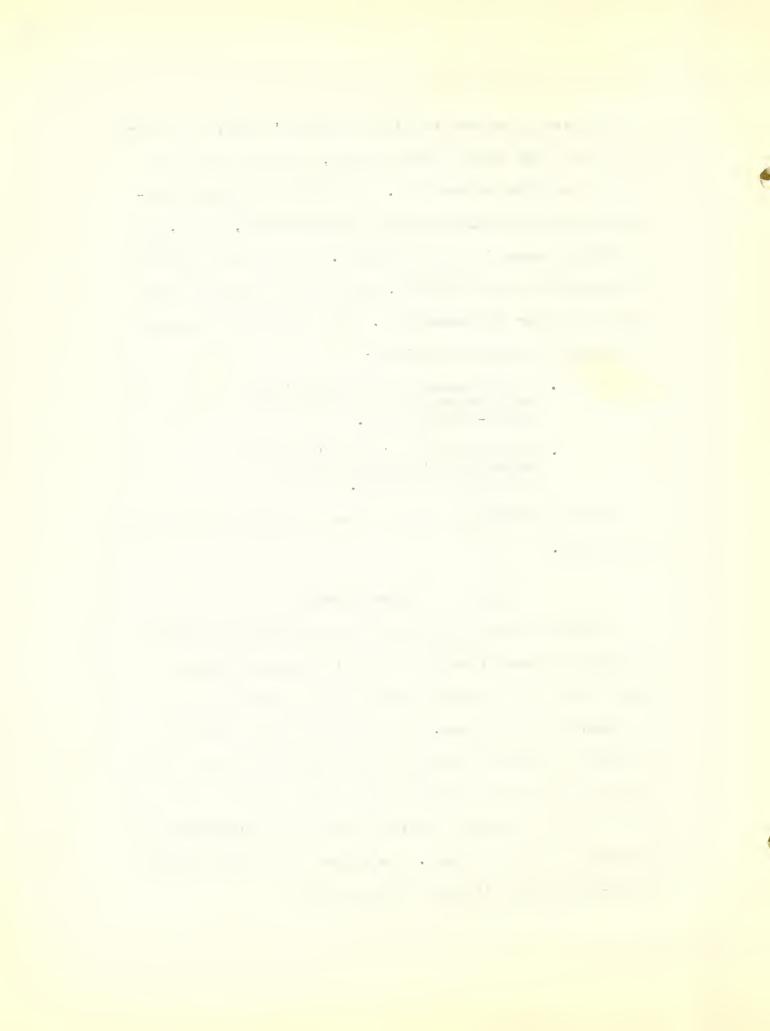
In spite of the unreliability of teachers' marks, due not only to the "halo" but to the "horned" effect, a study of this type would be incomplete without them. Each child had received a bimonthly report card which included marks in conduct, effort, and all subjects taught in his or her grade. At the time this testing program was being carried on, each child had received three sets of marks for the current year. These ratings were examined and the children grouped as follows:

- Pupils receiving all A's and B's on their report cards and assumed to be a well-adjusted group.
- 2. Pupils receiving D's and E's (failing marks) on their report cards and assumed to be deviates.

Any child receiving a mark of C was not included in this part of the study.

Social and Emotional Factors

Do these measuring instruments under investigation actually distinguish between different groups? It is assumed that a broken home is not a normal home and that children coming from such homes will be deviates. "Broken home" is here defined as one where (1) marital separation of the parents was known to have already occurred with or without court proceedings; (2) or one where a moral or financial problem existed which necessitated the assistance of a social agency. The writer studied the California Test scores of the following different groups:



- 1. Children from broken homes
- 2. Children from unbroken homes

A bi-lingual home is the exception rather than the rule and a tendency toward maladjustment might be expected of children from such homes. Does the California Test "pick out" this difference? The writer studied the test scores of the following groups:

- 1. Children from bi-lingual homes
- 2. Children from mono-lingual homes

Statistical Techniques Used

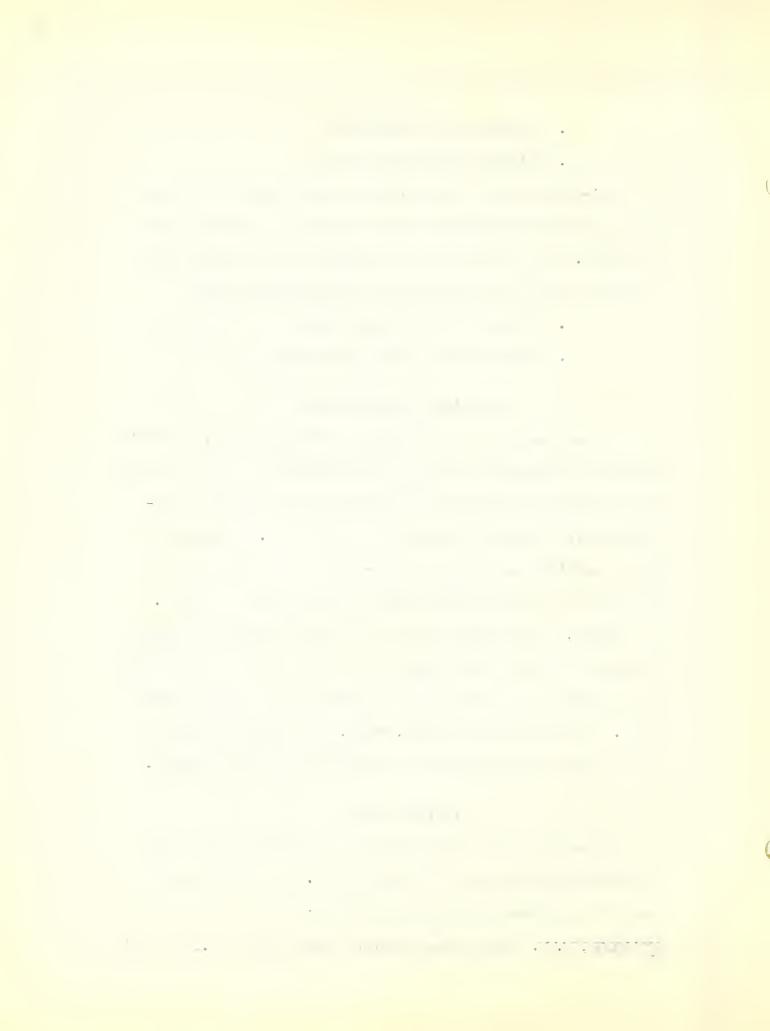
Aspects of Personality, and the Behavior Rating Scale were converted into percentile scores with the assistance of the tables of percentile norms provided with each one of the tests. A percentile may be described as a point on a 100-point scale which gives the per cent of scores which fall below that particular percentile.

For example, a pupil whose score falls at the 80 percentile point exceeds 80 per cent of the pupils on whom the test was standardized and is exceeded by 20 per cent of the pupils in the standardized group. Tables showing the range, means, and standard deviations of all scores were found and are shown in the following chapter.

Critical Ratios

The test of significant difference was applied to the means of certain groups which are described below. The theory behind tests of significance is explained by Mills.

I/ Mills, F. U. "Statistical Methods" Henry Holt & Co., New York



"In the two tests we have applied, no difficulty was encountered in interpreting the probabilities bearing on the relation between the hypothetical mean and the observed facts. In the one case, the odds were so small as to leave no doubt as to the lack of agreement; in the other case the difference was clearly insignificant. But many tests will lie on the borderline, and we must have some reasonable criterion as to the limit of significance. Odds of 1 out of 100 constitute one conventional standard. If a given difference between hypothetical and observed values would occur as a result of chance only 1 time out of 100, or less frequently, we may say that the difference is significant. This means that the results are not consistent with the hypothesis we have set up. If the discrepancy between theory and observation might occur more frequently than 1 time out of 100 solely because of the play of chance, we may say that the difference is not clearly significant. The results are not inconsistent with the hypothesis. The value of "T" (the difference between the hypothetical value and the observed mean, in units of the standard error of the mean) corresponding to a probability of 1/100 is 2.576. One hundredth part of the area under the normal curve lies at a distance from the mean, on the x-axis, of 2.576 standard deviations or more. Accordingly, tests of significance may be applied with direct reference to "T," interpreted as a normal deviate (i.e., as a deviation from the mean of a normal distribution expressed in units of the standard deviation). A value of "T" of 2.576 or more indicates a significant difference, while a value of less than 2.576 indicates that the results are not inconsistent with the hypothesis in question."

To discover whether or not these personality inventories distinguish between groups which are assumed to be well-adjusted and groups which are assumed or known to be mal-adjusted, we divided our population accordingly. The test of significance was utilized to show whether or not these differences are significant.



Comparisons Made

Group I Sex Differences based on California Personality Test Scores

Boys

Girls

- 1. Self Adjustment
- 2. Social Adjustment
- 3. Total Adjustment

Group II Sex Differences based on Pintner's Aspects of Personality

Boys

Girls

- 1. Ascendance-Submission
- 2. Introversion-Extroversion
- 3. Emotionality

Group III Differences based on I. Q. - California Personality Test

Are children with an I. Q. of 100 or more better adjusted than those with an I. Q. below 100? The California Personality Test scores were divided accordingly.

> Children with I. Q. of 100 or better

Children with I. Q.

below 100

- 1. Self Adjustment
- 2. Social Adjustment
- 3. Total Adjustment

Group IV Differences based on Report Card Marks

Children receiving Children receiving

D's and E's

A's and B's

- 1. Self Adjustment
- 2. Social Adjustment
- 3. Total Adjustment

Group V California Personality Test - Differences based on Haggerty-Ulson-Wickman Behavior Rating Scale

> Boys and girls at 50 percentile or better

Boys and girls lower than 50 percentile

- 1. Self Adjustment
- 2. Social Adjustment
- 3. Total Adjustment



Group VI California Personality Test - Differences based on stability of the home

> Boys and Girls from Boys and girls from broken homes

unbroken homes

- 1. Self Adjustment
- 2. Social Adjustment
- 3. Total Adjustment

Group VII California Personality Test - Differences based on the number of languages spoken in the home

> Boys and girls from bi-lingual homes

Boys and girls from mono-lingual homes

- 1. Self Adjustment
- 2. Social Adjustment
- 3. Total Adjustment

Correlation

The Pearson Product-Moment technique was used to discover the relationship between Achievement and Personality in

- a. Self Adjustment
- b. Social Adjustment
- c. Total Adjustment

Correlations were also derived between Achievement Scores and three Aspects of Personality

- a. Introversion-Extroversion
- b. Ascendance-Submission
- c. Emotionality



CHAPTER III
ANALYSIS OF DATA

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CHAPTER III

ANALYSIS OF DATA

Treatment of Data

The purpose of this experiment was to determine the validity of two tests:

- 1. The California Test of Personality
- 2. Pintner's Aspects of Personality

The tests were administered to 100 children in a public school who represented the total population in grades four, five, and six of that school. Studies have been made of the results of the personality inventories and of certain criterion which were employed in this experiment and which have been fully described in Chapter II. Tables summarizing the results of the tests are found in this chapter. The data were analyzed for the following comparisons and to find the answers to the following questions.

Comparisons Drawn

- 1. Sex differences based on California Personality Test Scores
- 2. Sex differences based on Pintner's Aspects of Personality
- 3. Personality Adjustment California Test based on Report Card Marks
- 4. Fersonality Adjustment California Test based on Intelligence
 Quotients
- 5. Personality Adjustment California Test based on Haggerty-Ulson-Wickham Behavior Rating Schedule B
- 6. Personality Adjustment California Test based on stability of the

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7. Personality Adjustment California Test based on the number of languages spoken in the home

Questions

We assumed that in a group of 100 public school children some were well-adjusted and some were mal-adjusted. We wished to find out.

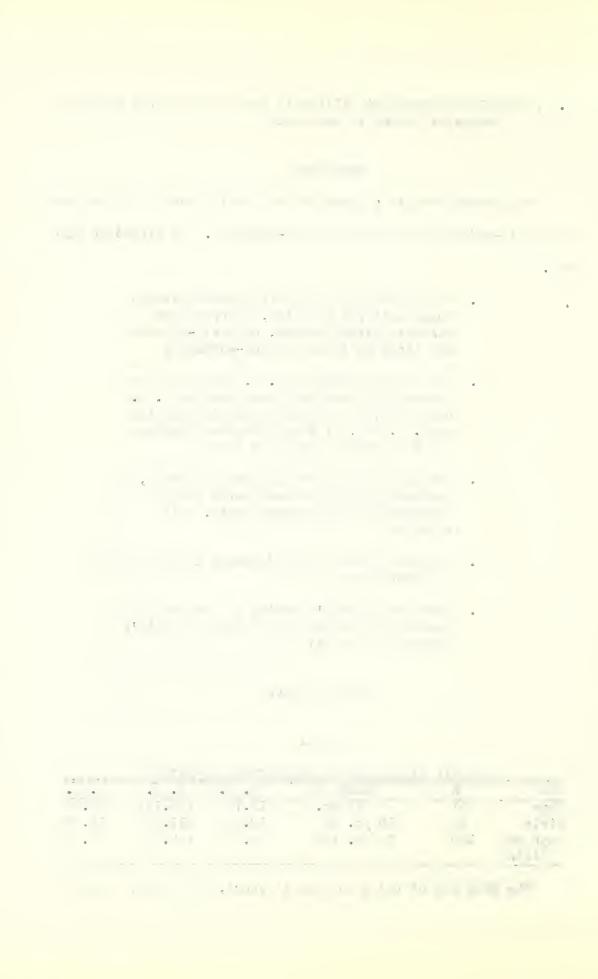
- 1. Do personality tests distinguish between those children we think, according to certain criterion data, are well-adjusted and those we think are mal-adjusted?
- 2. Are children with an I. Q. of 100 or more better adjusted than those with an I. Q. below 100? If we raise the dividing line to I. Q. 110, is the difference between the two groups greater or less?
- 3. Are children who are failing in school, as indicated by report card marks and the Metropolitan Achievement Tests, welladjusted?
- 4. Is good personality adjustment characteristic of either sex?
- 5. Does the teacher's rating of the pupil on personality traits agree with the pupil's rating of himself?

Summary Scores

TABLE T

	GEWERAL				LIDATING POF	ULATION	
SEX	N		MEA	N AGE		I. Q.	S. D.
Boys	61		11	yr.	15.72	105.16	17.90
Girls	39	10	yr.	8M	12.09	111.30	14.87
Boys and Girls	100	10	yr.	10M	14.53	107.55	17.05

The MEAN AGE of the group was 10 years, 10 months. Most of



the boys were between 9 years, 9 months and 12 years, 3 months while the girls' ages ranged from 9 years, 8 months to 11 years, 8 months. The MEAN I. Q. for the entire group was 107.55; for the boys, 105.16; and for the girls, 111.30.

TABLE II

	MEAN	SCORES (ON CALIFORN	IIA PERSON	ALITY TEST				
SEX	N		SECTIONS						
		Self Ad;	justment	Social A	Adjustm't	Total A	ldjustm't		
		MEAN	S. D.	MEAN	S. D.	MEAN	S. D.		
Boys	61	53.95	20.60	50.55	20.60	52.85	20.00		
Girls	- 39	59.25	20.70	61.90	18.60	61.05	18.45		
Boys and	100	56.00	20.80	55.00	21.20	56.05	19.85		
Girls									

Analysis of the data in Table II showed the girls' MEAN scores to be higher than the boys' in all three sections of the California Personality Test, with the greatest difference occurring in Social Adjustment where the girls' MEAN score was 61.90 or 11.35 points higher than the boys' which was 50.55. These differences are further analysed later in this chapter.

TABLE III

MEAN SCORES ON PINTNER'S - ASPECTS OF PERSONALITY
Section I Ascendance-Submission
Section II Introversion-Extroversion
Section III Emotionality

SEC	N	SECTION	I A-S	SECTION	II I-E	SECTION	III E
		MEAN	S. D.	MEAN	S. D.	MEAN	S. D.
Boys	61	49.92	28.70	68.20	27.25	60.75	29.55
Girls	39	47.05	29.90	50.00	31.40	57.70	31.10
Boys and	100	48.80	29.20	61.10	30.25	59.55	30.55
Girls							

Examination of the data in Table III showed that in the traits measured by Pintner's Inventory the boys' mean scores were higher

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than the girls', with the greatest difference appearing in INTROVERSION-EXTROVERSION where the boys' mean score was 68,20 while the girls averaged 50.00, a difference of 18.20 points in favor of the boys. That the California and the Pintner Inventories do not measure the same personality components is apparent from the foregoing tables.

TABLE IV

MEAN SCORES OBTAINED ON BEHAVIOR RATING SCALE

		HAGGEF	TY-OLSO	N-WIC	KMAN I	BEHAVIO	RRATIN	G SCHE	DULE B		
SEX	N	INTELI	ECTUAL	PHYS	ICAL	SOC	IAL	HMOTI	ONAL	TOT	AL
						M					
Boys	61	18.60	9.85	15.30	7.70	25.50	12.10	26.45	13.15	77.95	21.05
Girls	39	14.75	9.80	11.60	5.90	18.45	8.45	18.75	11.70	64.75	15.75
- 4	100	17.10	10.00	13.85	7.30	22.75	11.40	23.45	13.15	72.80	20.21
Girls											

Table IV summarizes the results obtained when the boys and girls in this experimental group were rated by their teachers on the Haggerty-Olson-Wickman Behavior Rating Schedule B. High scores represent undesirable deviations and low scores desirable deviations from the typical behavior of a group of children.

The authors of this test presented the following distribution of total scores in the Manual of Directions $\frac{1}{}$ on page 9, obtained as a result of teachers' ratings of over two thousand children.

TABLE V

TOTAL SCORES	ON HAGGERTY	-OLSON-	-WICKMAN	BEHAVIOR	RATING	SCHEDULE B
	SEX	N	MEAN	S. D.		
	Boys	1473	72.4	18.4	3 - 2 - 4 - 4 -	
	Girls	1394	65.9	16.3		
	Total	2867	69.2	17.7		

Haggerty-Olson-Wickman Manual of Directions for Behavior Rating Sched. B

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These data in Table V based on a population of over 2,000 children reveal the same tendency for girls to receive higher ratings than boys which the writer discovered in the present study, a tendency which seems to suggest that girls' behavior meets with greater approval than that of boys' in the eyes of the teacher.

Critical Ratios

After we had obtained the mean and sigma on all test scores for all groups in this experiment, we compared the means and asked, "To what extent is the difference between the means due to chance?" We either prove or disprove the null-hypotheses by finding critical ratios in our comparisons.

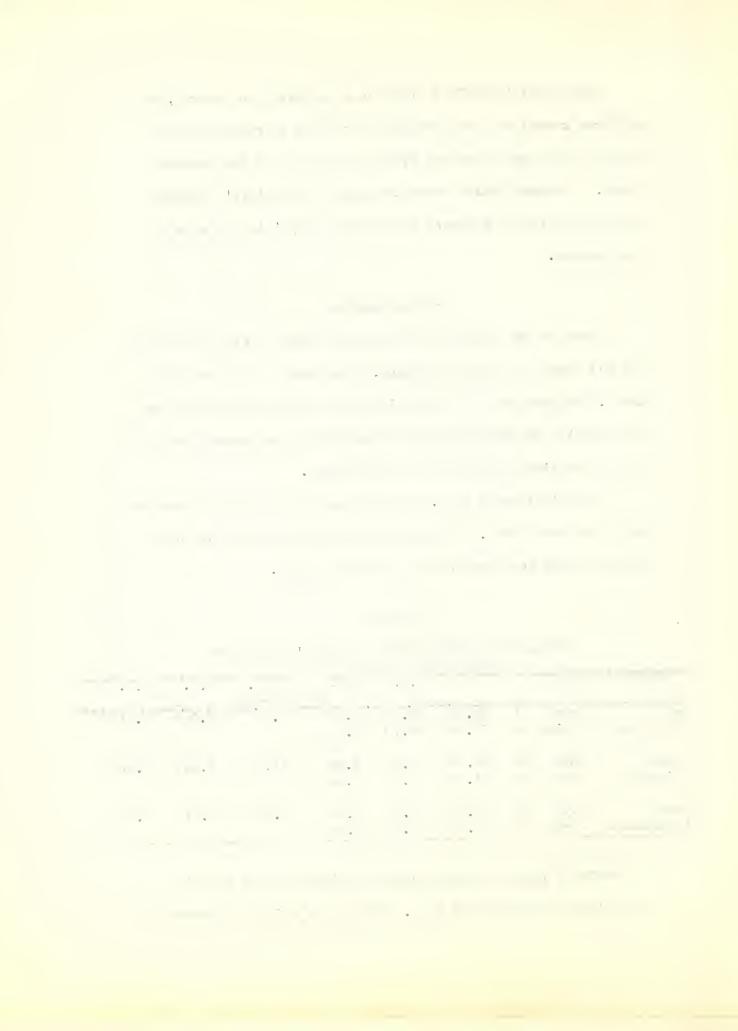
A critical ratio of 2.576 meets the test of significance at the 1 per cent level. Tables summarizing the results of comparisons made are found on the following pages.

TABLE VI

COMPARISON BETWEEN BOYS' AND GIRLS' SCORES ON

and the same	ODY	-		VIA PERSO				
SECTION	SEX	N	M	S.D.	S.E.	DIFF.	S.E.	C.R.
					m	ml - m2	d	
Self	Boys	61	53.95	20.60	2.64	5.30	4.241	1.25
Adjustment	Girls	39	59.25	20.70	3.32			
Social	Boys	61	50.55	20.60	2.64	11.35	3.981	2.852
Ad jus tment	Girls	39	61.90	18.60	2.98			
Total	Boys	61	52.85	20.00	2.56	8.20	3.91	2.097
Adjus tment	Girls	39	61.05	18.45	2.95			

Table VI shows the mean scores obtained by boys and girls on the California Personality Test. Although a slight difference in



favor of the girls occurred in all three parts of the test, in Social Adjustment only did the Critical Ratio (2.852) show the difference to be statistically significant. This means that the girls in terms of social adjustment were better than the boys.

TABLE VII

COMPARISON BETWEEN BOYS' AND GIRLS' SCORES
ON PINTNER'S ASPECTS OF PERSONALITY

	The Part of the Part of				The state of the s	And in case of the last of the	The state of the s	Column to the latest winds
SECTION	SEX	N	M	S.D.	S.E.	DIFF.	S.E.d	C.R.
I.								
Ascendance	Boys	61	49.92	28.70	3.674	0 077	0.040	A 17 C
Submission	Girls	39	47.05	29.90	4.791	2.87	6.042	.475
II								
Introversion	Boys	61	68.20	27.25	3.489	30.00		
Extroversion	Girls	39	50.00	31.40	5.032	18.20	6.122	2.973
III								
Emotionality	Boys	61	60.75	29.55	3.783	7 05	6 959	400
	Girls	39	57.70	31.10	4.393	3.05	6.252	.488

A study of the test results shown in Table VII seems to show that boys achieve slightly higher scores than girls in the traits tested by Pintner's Inventory. This difference in favor of the boys is statistically significant in the case of extroversion as shown by the critical ratio 2.973. It is a well-known fact that boys tend to be overted in behavior, a fact that often gets them into difficulty particularly in the classroom, while girls tend to be introverted which is not healthy.

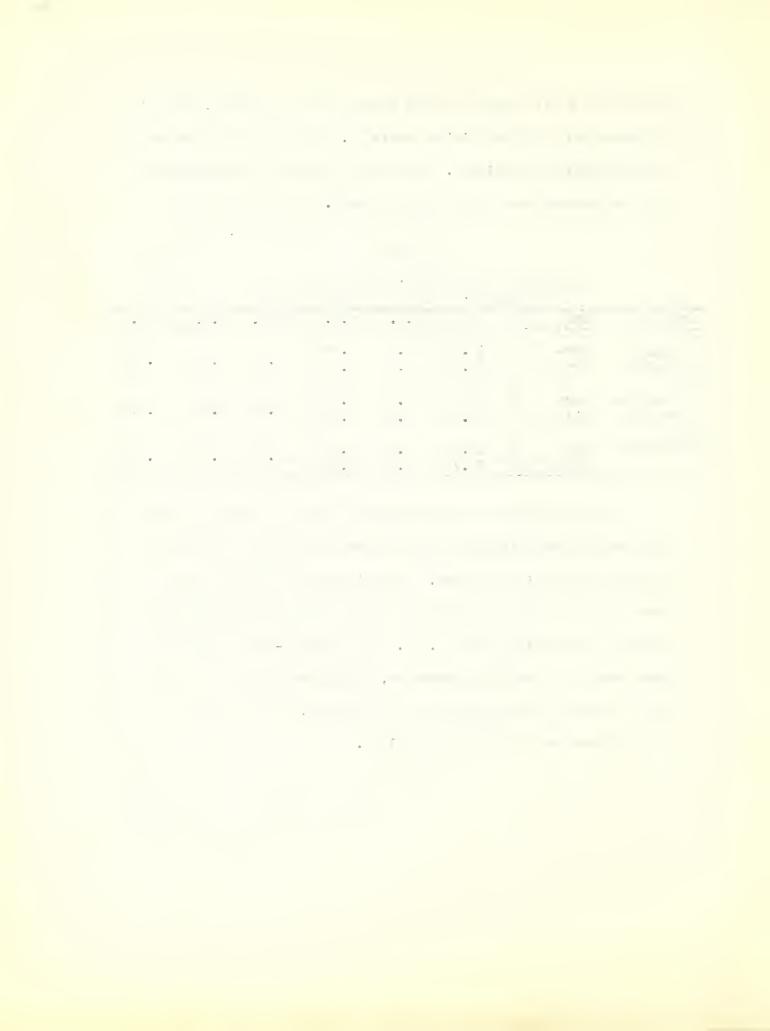


TABLE VIII

COMPARISON BETWEEN CALIFORNIA PERSONALITY TEST SCORES OF CHILDREN WITH I. Q. 100

SECTION	OR BET	TER AL	VD THOSE	WITH I.	S.E.m	DIFF.	S.E.d	C.R.
I	100							
SELF	or above	68	58.00	20.85	2.527	6.60	4.45	1.42
ADJUS TMENT	Below 100	3 2	51.70	20.70	3.657			
II	100							
SOCIAL	or above	68	56.30	21.95	2.660	4.10	4.31	.951
ADJUSTMENT	Below 100	32	52.20	19.20	3.392	7.10	T.07	• 207
III	100							
TOTAL	or above	68	58.53	19.70	2.390	5 07	7 41	3 475
ADJUSTMENT	Below 100	32	53.50	19.45	3.440	5.03	3.41	1.475

From the data in Table VIII are found the differences between the mean personality scores of children with an I. Q. of 100 or better and of those below 100. A difference in favor of the group with the higher I. Q. was noted, but the Critical Ratios were not sufficiently high to be statistically significant. In Social Adjustment the two groups appeared to be most nearly alike with a Critical Ratio of only .951 which would seem to indicate that, in social situations, these two groups adjust equally well.

A further attempt was made to find out if the California Personality Test distinguished between groups of unequal mental ability.

An I. Q. of 110 was used as the dividing line, the personality scores were divided accordingly, and the following results were obtained.

X) 1 15" 9 9 9 9 8 4 d . • N 7 n

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TABLE IX

COMPARISON BETWEEN CALIFORNIA PERSONALITY
TEST SCORES OF CHILDREN WITH 1. Q.

	110 OR AB	OVE AN	D THOSE	WITH I.	Q. BELOW	110		
SECTION	I. Q.	N	M	S.D.	S.E.m	DIFF.	S.E.d	C.R.
I	110							
SELF	or above	43	57.20	20.95	3.193			
ADJUSTMENT	Below 110	57	55.10	20.60	2.728	2.10	4.20	.50
II	110							
SOCIAL	or above	43	58.35	21.45	3.269			*
ADJUSTMENT	Below 110	57	52.55	20.65	2.735	5.80	4.27	1.358
III	110							
TOTAL	or above	43	58.25	19.85	3.025			
ADJUSTMENT	Below 110	57	54.40	19.65	2.602	3.85	3.99	.964

Analysis of data in Table IX showed that, by regrouping the experimental population using I. Q. 110 as the dividing line, certain changes occurred. However, the difference between the means of the high and low groups was even smaller than in Table VIII except in Social Adjustment. The mean for the low groups was 52.55 which is almost the same as the average for children with an I. Q. below 100, while the mean score in Social Adjustment for the high group (I. Q. 110 or better) went up to 58.35, making a difference between the means of 5.30 with a Critical Ratio of 1.358. Although this difference does not meet the test of significance which is 2.576, it appears that there is a tendency toward better social adjustment on the part of the group with an I. Q. of 110 or better.

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TABLE IX

COMPARISON BETWEEN CALIFORNIA PERSONALITY TEST
SCORES OF CHILDREN RECEIVING A'S AND B'S ON

	REPORT CARDS	AND THOSE RECEI	VING D's AND E's
SECTION	GROUP N	M S.D.	S.E.m DIFF. S.E.d C.R.
	A and B 36	67.80 16.20	2.70
SELF			17.40 5.299 3.283
ADJUSTMENT	D and E 24	50.40 22.35	4.56
II	A and B 36	67.43 15.40	2.566
SOCIAL			16.18 3.442 4.703
ADJUSTMENT	D and E 24	51.25 11.20	2.285
III	A and B 36	69.15 14.15	2.36
TOTAL			18.75 4.914 3.818
ADJUSTMENT	D and E 24	50.40 21.10	4.31

Is there a significant difference between the personality adjustment of children who are successful in school and those who are failures? A glance at Table IX forces us to the conclusion that there is. Children who received A's and B's on their report cards attained a mean score of 67.80 in Self-Adjustment while the failures averaged only 50.40, showing a difference of 17.40 between the means with a Critical Ratio of 3.283. In Social Adjustment the difference between the means was 16.18 in favor of the A and B group with a Critical Ratio of 4.703. Total Adjustment scores bear out the same tendency with a mean score of 69.15 for the successful pupils and 50.40 for the academic failures with a Critical Ratio of 3.818.

Critical Ratios obtained by comparing the means of these two groups far exceed the required 2.576 which is necessary for significance and suggest that either (1) teachers' marks are influenced either favorably or unfavorably according to the child's personality

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or (2) success in school tends to influence personality adjustment in a way which is highly favorable.

TABLE X

COMPARISON BETWEEN CALIFORNIA PERSONALITY
TEST SCORES OF CHILDREN FROM BROKEN HOMES

SECTION	GROUP	N	M	S.D.	S.E.m	DIFF.	S.E.d	C.R.
1	Unbroken	-				4-114-3-51-51-5		
SELF	Homes	69	60.15	20.35	2.45	13.40	4.126	3.244
ADJUSTMENT	Broken	31	46.75	18.50	3.32	T9 • 40	4.120	3.444
II	Unbroken							
SOCIAL	Homes	69	59.04	19.35	2.388	13.75	4.438	7 006
ADJUSTMENT	Broken	31	45.30	20.85	3.743	19.19	4.430	3.096
III	Unbroken							
TOTAL	Homes	69	60.15	19.00	2.29	14.19	3.97	3.574
ADJUSTMENT	Broken	31	45.96	18.05	3.24			

Does the California Personality Test distinguish between those children whome we consider as coming from normal homes and those whom we have reason to believe come from maladjusted homes? Analysis of the statistics shown in Table X leads us to believe that is does. Children from broken homes averaged only 46.75 in Self-Adjustment out of a possible one hundred, while those from stable homes had a mean score of 60.15. In terms of Social Adjustment children from broken homes rank even lower with a mean score of only 45.30 while their more secure classmates attained a mean score of 59.05. The greatest difference between the means of these two groups, a difference of 14.19 points, appears in Total Adjustment where children from umbroken homes showed a mean score of 60.15 while those from broken homes averaged 45.96, a difference of 14.19 points.

Critical Ratios of 3.244 in Self-Adjustment; 3.096 in Social Adjustment; and 3.574 in Total Adjustment point to the conclusion that home environment has a profound influence upon a child's

 personality adjustment.

TABLE XI

COMPARISON BETWEEN CALIFORNIA PERSONALITY
TEST SCORES OF CHILDREN FROM BI-LINGUAL

	HOMES AND T	HOSE	FROM MONG	J-LINGUAL	HOMES			
SECTION	HOME	N	M	S.D.	S.E.m	DIFF.	S.E.d	C.R.
SELF ADJUSTMENT	Mono-Lingual Bi-Lingual	64 36	59.75 51.65	19.93	2.50	8.10	4.317	1.875
SOCIAL ADJUSTMENT	Mono-Lingual Bi-Lingual	64 36	57.05 51.95	20.78 21.85	2.60 3.64	5.10	4.473	1.140
TOTAL ADJUSTMENT	Mono-Lingual Bi-Lingual	64 36	59.00 51.95	19.65 19.50	2.46 3.25	7.05	4.076	1.727

A study of the statistics in Table XI on two groups which were compared reveals a tendency on the part of children from mono-lingual homes to be better adjusted than those from bi-lingual homes. Critical Ratios of 1.875 in Self-Adjustment; 1.140 in Social Adjustment; and 1.727 in Total Adjustment, while not statistically significant, nevertheless suggest that children coming from homes where one language is spoken have a better chance of being well-adjusted than those children in whose homes more than one language is commonly spoken.

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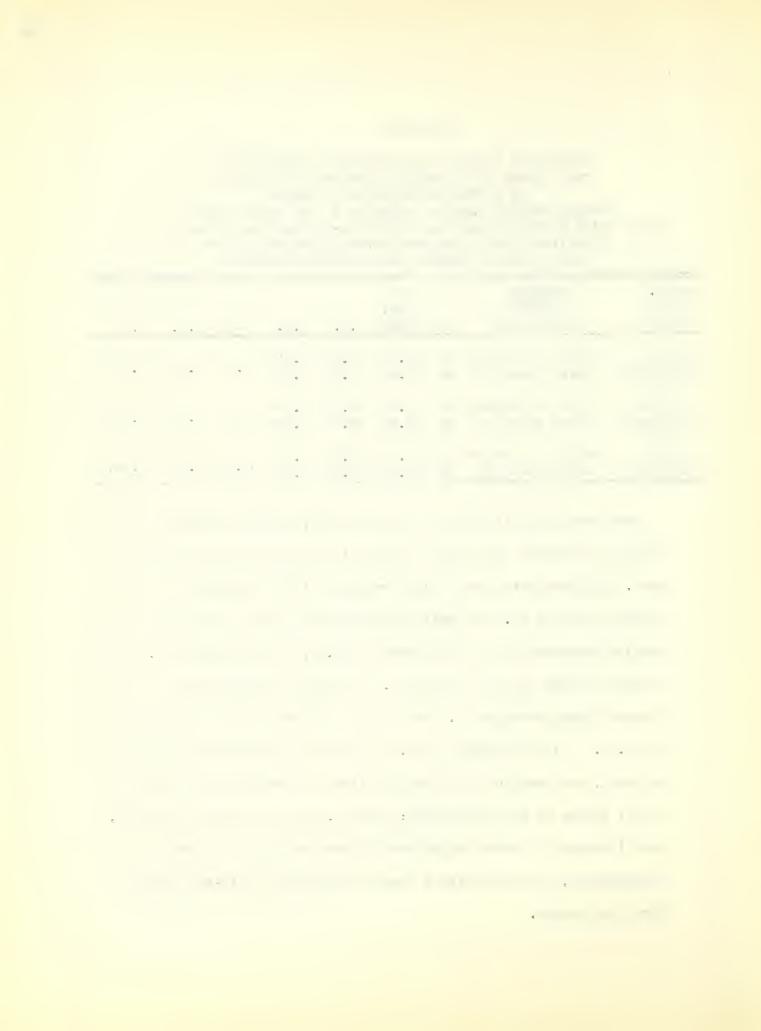
TABLE XII

COMPARISON BETWEEN THE CALIFORNIA PERSONALITY
TEST SCORES OF CHILDREN AT THE 50th PERCENTILE
OR BETTER ON THE HAGGERTY-OLSON-

WICKMAN BEHAVIOR RATING SCHEDULE B AND THOSE WORSE
Note: High Scores on the Haggerty-Olson-Wickman Scale Denote
Undesirable Deviation from Normal Behavior and Low
Scores Denote Freedom from Problem Tendencies

CALIF. TEST SCORES	FREEDOM PROBLEM TENDENCIES	N	M PER. SCORE	S.D.	S.E.m	DIFF.	S.E.d	C.R.
I SELF ADJUSTMENT	50%ile or better Worse than 50%		60.00 51.45	18.95 21.50	2.824	8.55	4.045	2.111
SOCIAL ADJUSTMENT III	50%ile or better Worse than 50%	45 5 5	62.55 47.20	16.50 21.80	2.459 2.938	15.35	3.833	4.007
TOTAL ADJUSTMENT	50%ile or better Worse than 50%	45 55	61.80 50.80	16.50 20.60	2.46 2.78	11.00	3.72	2.957

Does the teacher's rating of the pupil agree with the pupil's rating of himself? The data in Table XII suggest that such is the case. Children with low problem tendencies (50 per centile or better) averaged 60.00 in Self-Adjustment while those with high problem tendencies had a mean score of 51.45, a difference of 8.55 points in favor of the first group. In Social Adjustment the "normal" group averaged 62.55 while the "deviates" had a mean score of 47.20. This difference of 15.35 is not only statistically significant, but bears out a tendency noticed in comparing the means of all groups in this experiment; that is, where a difference occurs, the difference in Social Adjustment appears to be greater and, consequently, more significant than differences in Self-Adjustment or Total Adjustment.



Critical Ratios of 4.007 in Social Adjustment and 2.957 in

Total Adjustment in favor of the first group suggest that children

who are well-adjusted tend to receive better behavior ratings from

their teachers than those who are maladjusted. Whether good

adjustment is the cause or effect of desirable behavior ratings is

a question for discussion and further study.

CORRELATION COEFFICIENTS

The Pearson Product-Moment Method was applied to discover what correlation exists between the following scores:

- 1. California Personality Adjustment and Metropolitan Achievement
- 2. Pintner's Aspects of Personality and Metropolitan Achievement

There appeared to be no correlation whatever between achievement and the traits measured by the California Personality Inventory as shown by the following coefficients which were obtained:

1.	Self Adjustment	r.004	Metropolitan Achievem	ent
2.	Social Adjustment	r.001	Metropolitan Achievem	ent
3.	Total Adjustment	r001	Metropolitan Achievem	ent

The traits measured by Pintner's Inventory appeared to have some relationship to Achievement, but it was so slight as to have no forecasting efficiency and to be of little practical value.

Achievement	r.186	Ascendance-Submission
Achievement	r11	Introversion-Extroversion
Achievement	r50	Emotionality
	Achievement	Achievement r11

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CHAPTER IV
SUMMARY AND CONCLUSIONS



CHAPTER IV

SUMMARY

The purpose of this experiment was to determine the validity of two tests:

- 1. The California Personality Test
- 2. Pintner's Aspects of Personality

Criterion Data:

- 1. Sex
- 2. Intelligence Quotients
- 3. Metropolitan Achievement Test Scores
- 4. Report Card Marks
- 5. Broken Homes
- 6. Bi-lingual Homes
- 7. Haggerty-Olson-Wickman Behavior Rating Schedule B

The following comparisons were drawn:

- 1. Sex Differences Based on California Personality Test Scores
 - a. Self-Adjustment
 - b. Social Adjustment
 - c. Total Adjustment
- 2. Sex Differences Based on Pintner's Aspects of Personality
 - a. Ascendance-Submission
 - b. Introversion-Extroversion
 - c. Emotionality
- 3. Personality Adjustment Differences Based on Report Card Marks
 - a. Self-Adjustment
 - b. Social Adjustment
 - c. Total Adjustment
- 4. Personality Adjustment Differences Based on I. Q.
- 5. Personality Adjustment Differences Based on Haggerty-Olson-Wickham Behavior Rating Schedule B

- 6. Personality Adjustment Differences Based on Stability of the Home
- 7. Personality Adjustment Differences Based on the number of languages spoken in the home.

The test of significance was utilized to show whether or not the differences found were significant.

The data were analyzed in an effort to answer the following questions:

- 1. Is good personality adjustment characteristic of either sex?
- 2. Are children who are failing in school welladjusted?
- 3. Are children with a high I. Q. better adjusted than those with a lower I. Q.?
- 4. Do personality tests distinguish between children whom we think are well-adjusted and those we have reason to believe are maladjusted?
- 5. Does the teacher's rating of the pupil agree with the pupil's rating of himself?

CONCLUSIONS

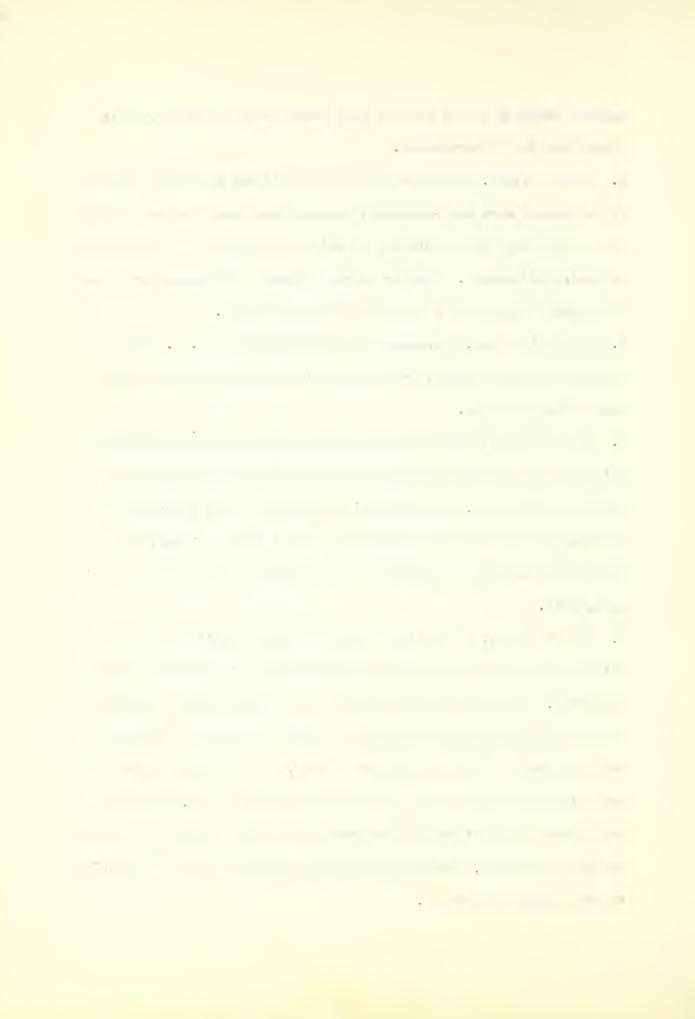
1. In this study, a slight difference in favor of the girls was found in all traits measured by the California Personality Test. In terms of Social Adjustment, the girls were considerably better than the boys.

In those traits measured by Pintner's Inventory (1) Ascendance-Submission; (2) Extroversion-Introversion; (3) Emotionality, the boys' scores were slightly higher than the girls' scores in parts I and III and markedly higher in Extroversion, which suggests a

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healthy tendency on the part of boys toward overt behavior, while girls tend to be introverted.

- 2. In this study, the writer found that children who were successful in school were well-adjusted, whereas those who received failing marks also made poor adjustment in all areas tested, but particularly in Social Adjustment. Whether mal-adjustment is the cause or effect of academic failure is a problem for further study.
- 3. From this study, it appears that children whose I. Q. falls within the normal range (90-110) tend to be better adjusted than those above or below.
- 4. In this study, when used on children coming from homes which we believe to be stable and intact and from homes we have reason to consider inadequate, the California Personality Test actually did distinguish between the two groups in such a way as to leave no doubt that make up of the home is an important factor in the child's adjustment.
- 5. In this study, the writer found that the portrait which the child painted of himself agreed with the teacher's estimate of his character. Children with high scores on the California Personality Test were rated by their teachers as freer from problem tendencies than the group with low adjustment scores. This tendency shows up most clearly in their social relations suggesting that, whereas a maladjusted child might find compensations within himself which aid in self adjustment, nevertheless problem tendencies are an obstacle to good social adjustment.



Implications of this Study

The educational implications of this study seem to be that the California Personality Test and Pintner's - Aspects of Personality have some value in distinguishing between "normal" children and "deviates" and in assisting in their early discovery; that, as a supplemental device, they may be used with confidence by teachers who wish to understand and guide "the whole child" through the educational process and to help him become a well-adjusted member of society; and that, due to certain limitations within the tests, they appear to be of more value when used in middle grades than when used above or below the fourth, fifth, and sixth grades.

New Problems Discovered

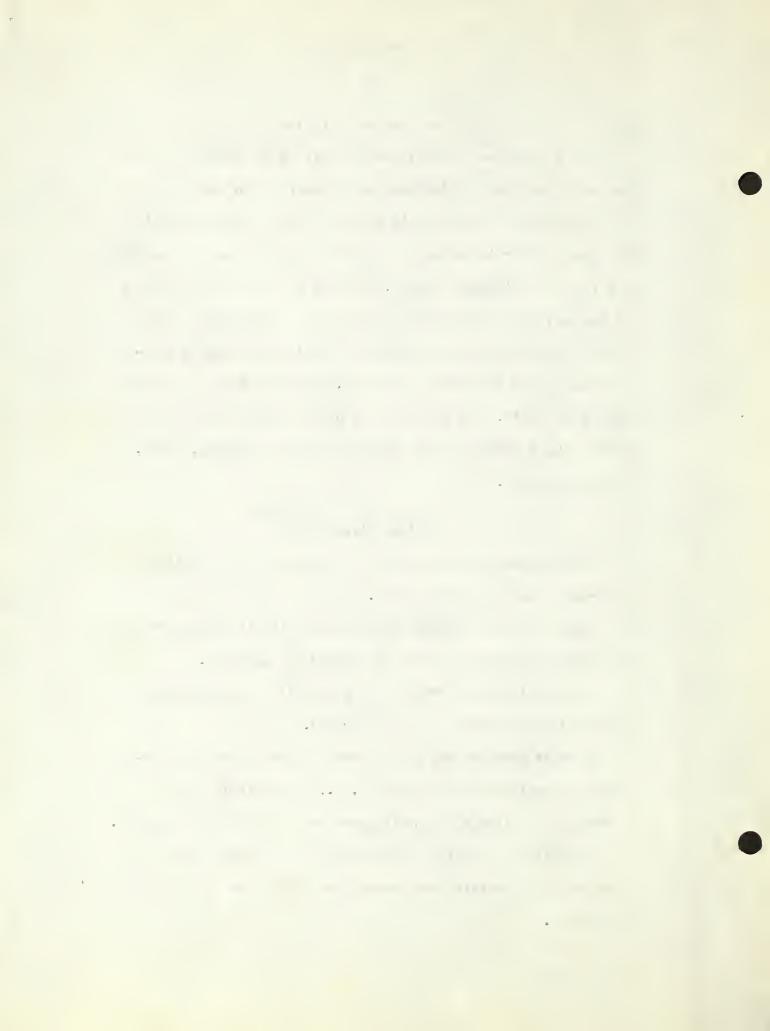
Further research is needed to discover and define all the important aspects of personality.

The difference between boys and girls in all the important aspects of personality should be studied and analyzed.

The relationship between each personality trait and good personality adjustment should be studied.

Further research needs to be done on the relationship between personality adjustment and I. Q., particularly at the extremely high levels of intelligence and at the very low levels.

Retesting personality adjustment after a lapse of time in which specific training has taken place would make an interesting experiment.



CALIFORNIA TEST OF PERSONALITY—ELEMENTARY, FORM A

A PROFILE OF PERSONAL AND SOCIAL ADJUSTMENT

Devised by Louis P. Thorpe, Ernest W. Tiegs, and Willis W. Clark

Name		Gra	de
School	Age	Last Birthday.	
Teacher		Date	Sex: Boy-Girl
			- China
COMPONENTS Possible Score	Pupil's Percentile Score Rank	PERCENT! (Chart Pupil's Percenti	
I. Self Adjustment 72	42 30 1 10	20 30 40 50	60 70 80 90 99
A. Self-reliance 12	980		
B. Sense of Personal Worth . 12	<u></u>	x	
C. Sense of Personal Freedom . 12	11 55		
D. Feeling of Belonging 12	10 40 -		
E. Withdrawing Tendencies . 12	5.20	k	
F. Nervous Symptoms 12 (Freedom from)	21		
2. Social Adjustment 72	65 70 1 10	20 30 40 50	60 70 80 90 99
A. Social Standards 12	12 . 90 1		
B. Social Skills 12	9. 45	<u>*</u>	
C. Anti-social Tendencies 12	11. 65		<u>-</u> X
D. Family Relations 12			
E. School Relations 12	10.50		
F. Community Relations 12	11.55		
TAL ADJUSTMENT 144	107 45	20 30 40 50 PERCENT	

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After each of the following	questions,
make a circle around the YES of	or NO.
For example, if you have a do	

make a circle around YES. Do the other one the same way.

NO

74. L D Go camping 50. L D Play chess 73. L D Belong to Scouts 49. L D Play checkers 48. L D Play dominoes 72. L D Be officer of a club 71. L D Go to a dance 47. L (D) Play cards 70. (L) D Go to a party 69. L D Go to a church social 68. L D Play in an orchestra 46. (L) D Ride a horse 45. (L) D Ride a bicycle 67. L D Play in a band group 44. L(D Skate 66. L D Go hiking with a 43. L D Climb 65. L D Go hunting 42. (L) D Go fishing 64. (L) D Play tennis 41. (L) D Visit rivers 63. L D Play ball 40. (L) D Play with pets 62. L D Play croquet 39. L D Play on sandpiles 61. (L) Play ping pong 38. L D Make a garden 60. L D Belong to a gang 37. L D Work with tools 59. L D Sing in a glee club 36. L D Use building toys 58. L D Sing in a chorus 35. L D Make airplanes 34. L D Make boats 57. (L) D Go to a circus 56. L D Go to a carnival 33. L D Knit 35. L D Sew 55. L D Go to parks 31. L D Practice writing Or YWCA 54. L D Belong to YMCA 30. L D Cut out pictures 53. L D Belong to a club 29. L D Collect pictures 52. (L) D Go to Sunday School 28. L D Collect autographs 51. L D Go to church

26. L D Collect stamps 25. L D Take pictures 24. L D Play a harmonica 23. (L) D Speak pieces 22. L D Write 21. L D Keep a diary 20. L D Make a scrapbook 19. (L) Play piano 18. L D Sing 17. (L) D Design 16. L D Model 15. L D Paint 14. L Draw 13. D Study butterflies 12. L D Study animals 11. (L) D Study birds 10. (L) D Study trees 9. L D Study geography 8. L D Study spelling 7. L D Study science 6. L D Study history 5. L D Study arithmetic 4. L D Study reading 3. L D Go to movies 2. L D Read stories 1. L (D) Play the radio 27. (L) D Collect coins

really do.

First look at each thing in this test. Make a circle around the L for each thing that you like or would very much like to do. Then make a circle around the D for things you

INTERESTS AND ACTIVITIES

INSTRUCTIONS TO PUPILS

On the next pages are more questions. The answers are not right or wrong,

or what you do about things.

Go right on from one page to another until you have finished them all.

but show what you think, how you feel,

A. Do you have a dog at home? YES YES NO B. Can you ride a bicycle?

1. Would you rather plan your own work than to have some one else plan it for you?

2. Do you usually apologize when you are wrong?

3. When you have some free time, do you usually ask your parents or teachers what to do?

4. When someone tries to cheat you, do you usually try to stop him?

5. Is it easy for you to recite or talk in class?

NO

6. Do you like to meet new people or introduce them to others?

YES (NO

7. Do you usually go to bed on time, even when you wish to stay up?

8. Is it hard to do your work when someone blames you for something?

YES NO

9. Do you usually eat food that is good for you, even if you do not like it?

NO

10. Do your parents or teachers usually need to tell you to do your work?

11. Do you get excited when things go wrong?

12. Do you usually keep at your work until it is done? YES

Score Section 1 A.....

13. Do your friends generally think that your ideas are good?

14. Do most of your friends and classmates think you are bright?

YES

15. Are your friends and classmates usually interested in the things you do?

16. Do you wish that your father (or mother) had a better job?

17. Do your classmates seem to think that you are not a good friend?

18. Do your friends and classmates often want to help you?

YES

19. Are you sometimes cheated when you trade things? (YES) NO

20. Do your classmates and friends usually feel that they know more than you Sob

21. Do your folks seem to think that you are doing well?

YES NO

22. Can you do most of the things you try?

(YES) NO

23. Do people often think that you cannot do things very well?

24. Do people often do nice YES NO things for you?

Score Section 1 B

- 27. Do others usually decide to which parties you may
- 28. May you usually bring your friends home when YES NO you want to?
- 29. May you usually do what you want to during your YES NO spare time?
- 30. Do you have a chance to YES NO see many new things?
- 31. Do your folks often stop you from going around NO YES with your friends?
- 32. Are you allowed to do most of the things you YES NO want to?
- 33. Are you given some spending money? YES NO
- 34. Do your folks stop you from taking short walks YES NO with your friends?
- 35. Are you punished for lots YES NO of little things?
- 36. Do you feel that your folks boss you too much? YES (NO

Score Section 1 C...

- 37. Do pets and animals make friends with you easily? YES NO
- 38. Are you proud of your school?
- 39. Do your classmates think you cannot do well in school? YES

YES NO

- 40. Are you as well and strong as most boys and girls?
- 41. Are your cousins, aunts, uncles, or grandparents as nice as those of most of your friends? YES) NO
- 42. Are the members of your family usually good to you?
- 43. Do you often think that nobody likes you?
- 44. Do you feel that most of your classmates are glad that you are a member of the class? YES NO
- 45. Do you have just a few friends? NO
- 46. Do you often wish you had some other parents?
- 47. Are you sorry you live in YES (NO the place you do?
- 48. Do your friends have better times at home than vou do?

Score Section 1 D.

YES (NO

49. Have people often been so unfair that you gave up?

YES (NO

50. Do you often think of many things that are dangerous?

NO

51. Do you often meet people who are so mean that you hate them?

NO

52. Do you often think about such things as failing in your studies, losing money, losing your parents, or dying?

53. Do your friends or your work often make you worry?

MO YES

54. Is your work often so hard that you stop trying?

YES NO

55. Are people often so unkind or unfair that it makes you feel bad?

YES NO

56. Do your friends or classmates often say or do things that hurt your feelings?

YES NO

57. Do people often try to cheat you or do mean things to you?

58. Are you often with people who have so little interest in you that you feel lonesome?

NO

59. Are your studies or your life so dull that you often think about many other things?

YES NO

60. Are people often mean or unfair to you?

NO

Score Section 1 E.....

61. Do you often have sneezing spells?

62. Do you often have bad dreams?

NO

63. Do you bite your fingernails often?

64. Does it usually take you a long time to go to sleep at night?

YES NO

65. Does your head ache often?

66. Do you often find you are not hungry at meal time? YES/

67. Do you take cold easily?

68. Do you often feel tired in the forenoon?

YES' (NO)

69. Do you often tap with your fingers on a table or YES NO desk?

70. Do you often feel sick at YES NO your stomach?

71. Do you often have dizzy spells?

YES (NO

72. Do your eyes hurt you often?

Score Section 1 F......

73. When people get sick or are in trouble, is it usually their own fault?

YES NO

73

74. Is it all right to disobey teachers if you think they are not fair to you?

75. Should only the older boys and girls be nice and friendly to new people? YES NO

76. Is it all right to take things you need if you have no money?

YES NO

77. Is it necessary to thank those who have helped you?

YES) NO

78. Do children need to obey their fathers or mothers even when their friends tell them not to?

NO

79. If a person finds something, does he have a right to keep it or sell it?

80. Is it all right to make fun of boys and girls who do not believe what you do? YES (NO)

81. Should children obey signs that tell them to stay off of other peoples' grounds?

82. Should children be nice to people they don't like? (YES) NO

83. Is it all right for children to cry or whine when their parents keep them home from a show?

84. Is it all right to cheat in a game when the umpire is not looking?

Score Section 2 A.....

85. Do you like to speak or sing before other people? YES (NO)

86. When people make you angry do you usually keep it to yourself?

YES NO

87. Do you help new pupils to talk to other children? YES

88. Does it make you feel angry when you lose in games at parties?

YES \NO

89. Is it hard for you to talk to people as soon as you meet them?

90. Do you usually help other boys and girls to have a YES NO good time?

91. Do you usually act friendly to people you do not like?

YES NO

92. Do you often change your plans in order to help YES) NO people?

93. Do you usually forget the names of people you meet?

94. Do you often say nice things to people when they do well?

NO

NO

95. Do you try games at parties even if you haven't played them before?

96. Do you talk to new children at school?

NO

Score Section 2 B.....

97. Do people often ask you to do such hard or foolish things that you won't do them?

NO

97

98. Are the tests at school often so hard or unfair that it is all right to cheat?

NO

99. Do you often make friends or classmates do things they don't want to?

YES NO

100. Are things sometimes so bad at school that you stay away?

YES NO

101. Do people often act so badly that you have to be mean or nasty to them? YES (NO

102. Do you often have to make a "fuss" or "act up" to get your rights?

103. Is anyone at school so mean that you tear, or cut, or break things?

YES (NO)

104. Is it hard to make people remember how well you can do things?

105. Is someone at home so mean that you often have to quarrel?

YES NO

106. Do you sometimes need something so badly that it is all right to take it?

107. Do classmates often quarrel with you?

108. Do you like to scare or push smaller boys and girls?

Score Section 2 C...

109. Do you have a hard time because it seems that your folks hardly ever have enough money?

YES (NO

110. Do your folks seem to think that you are just as good as they are?

YES NO

111. Are you unhappy because your folks do not care about the things you like? YES (NO

112. When your folks make you mind are they usually nice to you about it?

113. Do your folks often claim that you are not as nice to them as you should be?

YES NO

114. Do you like both of your parents about the same?

115. Does someone at home pick on you much of the time?

YES NO

116. Does it seem to you that your folks at home often treat you mean?

117. Do you try to keep boys and girls away from your home because it isn't as nice as theirs?

YES

118. Do you sometimes feel like running away from home?

YES NO

119. Do you feel that no one at home loves you?

YES NO

120. Have you often felt that your folks thought you would not amount to anything?

YES NO

Score Section 2 D.,

133

you do?

school?

132. Do the boys and girls

usually treat you nice at

Score Section 2 E.....

- 133. Do you visit many of the interesting places near YES NO where you live?
- 134. Do you sometimes do things to make the place in which you live look YES NO nicer?
- 135. Do you think there are too few interesting places near your home?
- 136. Do you ever help clean up things near your home? YES
- 137. Do you take good care of your own pets or help with other people's pets? YES NO
- 138. Do you sometimes help other people?
- 139. Do you try to get your friends to obey the laws? YES
- 140. Do you help children keep away from places where they might get sick? YES NO
- 141. Do you usually try to be nice to peope who are not the same color or race as you are?
- 142. Is it all right to do what you please if the police YES (NO are not around?
- 143. Does it make you glad to see the people around your YES house get along fine?
- 144. Do you dislike many of the people who live near your home?

Score Section 2 F....

YES NO

ASPECTS OF PERSONALITY

By RUDOLF PINTNER

Professor of Education
Teachers College, Columbia University

John J. Loftus

Assistant Superintendent of Schools, New York City

GEORGE FORLANO

Assistant in Educational Psychology Teachers College, Columbia University

and Benjamin Alster

Teacher, Public Schools of New York City

For Grades 4 to 9 Inclusive

Name	Date	19
GradeAgeyrsmos.	Teacher	
SchoolCity	State	

Section	Aspect of Personality	Score	Percentile Rank
I	Ascendance-Submission	17	- /
II	Extroversion-Introversion	14	
III	Emotionality	,	57

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SECTION I

Ι

1.	When some child tries to push into line ahead of me, I am not afraid to tell him to get back	1
2.	I try to be the first one to get on a streetcar	D_{2}
3.	I am among the first to yell at a game	$\boxed{\mathrm{D}}_{3}$
4.	I try to get a seat in the streetcar or train before someone else does.	D 4
5.	I get angry when the class leader is too "bossy."	$\boxed{\mathbf{D}}_{5}$
6.	I am usually doing the talking in any crowd	$\boxed{\mathbf{D}}_{6}$
7.	I find it hard to talk before other children	7
8.	I talk back to a friend who is "bossy."	D 8
9.	I like to show people around to meet other people	D 9
10.	If there are pieces of salt in my ice cream, I tell the storekeeper about it	D 10
11.	I tell the groceryman that it is my turn when the grocer tries to wait on someone else first	D 11
12.	I try to get the storekeeper to sell me candy at a cheaper price	D 12
13.	Even though I don't understand what the teacher says, I don't ask her to say it again	D 13
14.	I do almost everything other people tell me to do	D 14
15.	I am often against what people say	15
16.	I stick to what I've said even if other children don't like it	D _16
17.	I don't mind when other children get ahead of me in line	D 17
18.	I have a lot of nerve	D 18
19.	I always want to have my way with other people S	D 19
20.	I try to get my own way even if I have to fight for it (Go right on to the next for it	D 20 page.)

21.	I think that friends who don't agree with me are stupid.	D 21
22.	I raise my hand so that the teacher will call on me to go on an errand.	22
23.	I do not like to be the leader in games	$\boxed{\mathbf{D}}_{23}$
24.	I start the fun at a quiet party	D 24
25.	I do not like to start a new game among my friends, but I let someone else do it	D 25
26.	I like to be the first in line when I play a game	$\boxed{\mathbf{D}}_{26}$
27.	I get the boys and girls together for parties, clubs, and teams.	D 27
28.	I don't like to ask questions in class	$\boxed{\mathbf{D}}_{28}$
29.	I want to lead the class	$\boxed{\mathbf{D}}_{29}$
30.	I like to stick up for my rights	$\boxed{\mathbf{D}}_{30}$
31.	I like to talk with someone else about my work	D 31
32.	I like to go from one group of children to another and talk.	D 32
33.	When I make up my mind not to do a thing, I just won't do it	D 33
34.	I always want to be with my father and mother	D 34
35.	I feel sure I can do things I want to do	D 35

(Go right on to the next page.)

I

SECTION II

II

1.	I do not like to have people ask me questions about myself.	D_1
2.	I like baseball and football better than quiet games	D 2
3.	I would rather go to a party than stay at home	$\boxed{\mathbf{D}}_{3}$
4.	I would rather play with other children than play alone.	D 4
5.	I have many friends	D 5
6.	I do not make friends easily	D 6
7.	I like to go to school early because I have many friends waiting for me	X 7
8.	I like to make new friends	D ₈
9.	I like friends more than books	D 9
10.	I find it easy to start speaking to a new pupil	D 10
11.	I keep quiet when I am with other people	п
12.	I like to spend my vacation at some quiet place	D 12
13.	I do not mind when people say bad things about me	D 13
14.	I like to spend money	D 14
15.	I can be scolded without feeling hurt	15
16.	I make up my mind quickly	D 16
17.	I like to be in assembly plays	10 17
18.	I like to have people look at me when I am working S	\mathcal{D}_{18}
19.	I like to read before the class	$\left\ \bar{\mathbf{D}} \right\ _{1^0}$
20.	I do not like to work alone	\mathbb{N}_{20}
21.	I make up my mind without much thinking	15, 21
22.	I like to go camping rather than read about it	$\left\ \mathbf{D} \right\ _{22}$
23.	I would sooner say than write what I think	23

33. I think of smart things to say afterward, when it is too late.

S
D
33
1 Like to take charge of things for the teacher.

S
D
34

35. I like to go around classes, collecting money for the Red Cross.

(Go right on to the next page.)

 Π

Score

	SECTION III	II	I
1.	I like to go to the movies	S	$\boxed{\mathbf{D}}_{1}$
2.	I think most children like to make fun of me	S	$\boxed{\mathbf{D}}_{2}$
3.	I get angry about nothing	S	\mathbf{D}_{3}
4.	I get so angry I can't talk.	S	D 4
5.	I fall and trip over things	S	D 5
6.	I like to listen to the radio	S	D 6
7.	I find it hard to forget my troubles	S	D 7
8.	I often talk to myself	S	$\boxed{\mathbf{D}}_{8}$
9.	I like animals as pets	X	D 9
10.	I often have ideas run through my head, so that I	16.2	
	cannot sleep	A	D 10
11.	I never tear pages from my school or library books	3	D 11
12.	I often giggle and laugh for no reason at all	R.	$\boxed{\mathbf{D}}_{12}$
13.	I often cry without good reason	S	D 13
14.	I make believe I am somebody else	S	D 14
15.	I am always afraid that sad things will happen to me	S	D 15
16.	I do not talk during fire drill	S	D 16
17.	I think that I was happier when I was a baby	S	D 17
18.	I always cross the street at the corners	S	D 18
19.	I often think people follow me at night	S	D 19
20.	I think that my friends are against me	\mathbf{S}'	D 20
21.	I often find it hard to breathe	S	D 21
22.	I feel tired most of the time	\$	D 22
23.	I often feel sick when I have to go to school	S	D 23
24.	I worry about getting siek.	[S]	24
25.	I don't like to be absent	X	D 25

		,
26.	I am afraid to sit in a small room with the door shut	D 26
27.	I am very much afraid of water	D 27
28.	I wish to do the right thing, but sometimes I can't get myself to do it.	D 28
29.	I cannot stand even a small noise	D 29
30.	I am afraid of thunder	$\boxed{\mathrm{D}}_{30}$
31.	I feel that I haven't a friend	D_{31}
32.	I like my school because it is clean	$\boxed{\mathrm{D}}_{32}$
33.	Everything gets on my nerves	D_{33}
34.	I often feel sad for no reason at all	D_{34}
35.	I say one thing and do another	$\overline{\mathrm{D}}_{35}$
36.	I like to tease my friends until they cry	$\boxed{\mathrm{D}}_{36}$
37.	I like this Same-Different game	D 37
38.	I believe almost anything that anybody tells me	D 38
39.	I cry when I am in trouble, because then people pity me. S	39
40.	I can't forget a wrong that's been done me	D 40
41.	I think that everybody keeps away from me	D 41
42.	I think my teacher is always watching me	D 42
43.	I think my parents pick on me too much	D 43
44.	I feel I get blamed for things I did not do	D 44

Ш

 $Score \dots \dots$



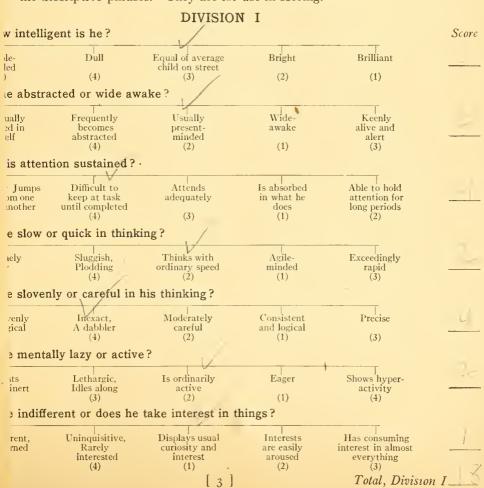
CHEDULE B: BEHAVIOR RATING SCALE

,		Division I	Score	
i	Grade	Division II Division III	2	_ [
3 pa	Date, 19	Division IV Total	21	18

DIRECTIONS FOR USING

Schedule B

- 1. Do not consult anyone in making your judgments.
- 2. In rating a person on a particular trait, disregard every other trait but that one. Many ratings are rendered valueless because the rater allows himself to be influenced by a general favorable or unfavorable impression that he has formed of the person.
- 3. When you have satisfied yourself as to the standing of this person in the trait on which you are rating him, indicate your rating by placing a cross (×) immediately above the most appropriate descriptive phrase.
- 1. If you are rating a child, try to make your ratings by comparing him with children of his own age.
- 5. The masculine pronoun (he) has been used throughout for convenience. It applies whether the person whom you are rating is male or female.
- h. In making your ratings, disregard the small numbers which appear below the descriptive phrases. They are for use in scoring.





Dengalor Maring

Score

	-	
	1	

BIBLIOGRAPHY

- ALLPORT, G. W. Personality A Psychological Interpretation, Henry Holt & Co., Inc., New York, 1937
- ALLPORT, G. W. "The Study of Personality by the Experimental Method,"
 Character and Personality, Vol. I, 1932-33
- ADAMS, H. F. "The Good Judge of Personality," Journal of Abnormal and Social Psychology, 1927, 22: 171-182
- BARTELL, M. E. Differences in Social Habits, Body Mechanics and Interests of High and Low Achievers, Unpublished Ed.

 M. Thesis, Boston University School of Education, 1942
- BERG, Louis The Human Personality, Prentice Hall, Inc., New York,
- BUROS, O. K. The Nineteen-Forty Mental Measurements Yearbook
- CATTELL, R. B. "Description of Personality" American Journal of Psychology, 1945, 58, Pp. 40-60
- DALEY, F. J. Maladjustment and Delinquency, Unpublished Ed. M. Thesis, Boston University, 1943
- GASKILL, H. Personality, Prentice Hall, 1936
- GREENE, H. A. Jorgensen and Gerberich Measurement and Evaluation in the Elementary School, Longmans, Green & Co., New York, 1942
- HARTSHORNE, H. and May Studies in Deceit The MacMillan Co., New York, 1928
- HEALY, W. Personality in Formation and Action Norton & Co., New York, 1928
- KVARACEUS, W. C. Juvenile Deliquency and the School, World Book Company, Yonkers-on-Hudson, New York, 1945
- KNIGHT, F. B. "The Effect of Acquaintance Factor Upon Personal Judgments" Journal of Education Psychology 14: 1923
- KANTOR, J. R. "Character and Personality: Their Nature and Interrelations," Character and Personality, Vol. VI, 1937-38

. _______

o 0

- KELLEY, MILES AND TERMAN "Ability to Influence One's Score on a

 Typical Pencil and Paper Test of Personality,"

 Character and Personality, Vol. IV, 1935-36
- McCALL, W. A. Measurement, The MacMillan Co., New York, 1939
- MAY Psychology at Work Chapter IV The Foundation of Personality ed Achilles, P. S., 1932
- MILLS, F. C. Statistical Methods, Henry Holt & Co., Inc., New York
- MONROE, W. S. and ENGLEHART, M. D. The Scientific Study of Educational Problems, The MacMillan Co., New York, 1936
- MURPHY, G. and JENSEN, F. Approaches to Personality, Coward-McCann Co.
 New York, 1932
- ODBERT, H. S. "Trends in the Study of Personality," Character and Personality, Vol. V, 1936-47
- PINTNER, R. et al. Aspects of Personality, World Book Company, Yonkers, New York, 1937
- PINTNER and FORLANO "Validation of Personality Tests by Outstanding Characteristics of Pupils" <u>Journal of Education</u>
 Psychology, 30: 25-32, January, 1939
- ROBACK, A. A. "Personality Tests," Character and Personality, Vol. I,
 No. 3 (March, 1933) Pp. 215-224
- ROBACK, A. A. "Personality Tests Whither," Character and Personality Vol. I, 1932-33
- SYMONDS, P. M. Diagnosing Personality and Conduct, D. Appleton-Century Company, 1931
- SYMONDS, P. M. Psychological Diagnosis in Social Adjustment, American Book Company, 1934
- SYMONDS, P. M. and JACKSON, C. E. Measurement of the Personality

 Adjustments of High School Pupils, Bureau of Publications

 Teachers College, Columbia University, New York, 1935
- STAGNER, R. Psychology of Personality, McGraw-Hill Book Company, New York and London, 1937
- SHAFFER, L. F. The Psychology of Adjustment, Houghton Mifflin Co., Boston, 1936

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- SPENCER, D. Fulcra of Conflict, World Book Company, Yonkers-on-Hudson, New York, 1939
- THORNDIKE, E. L. Mental and Social Measurement, Teachers College, Columbia University, New York, 1913
- THORPE, L. P. A Practical Guide to Personality Improvement, Longmans Green & Co., New York, 1945
- TRAXLER, A. E. "The Use of Tests and Rating Devices in the Appraisal of Personality" Educational Records Bulletin No. 23, Educational Records Bureau, New York, March, 1938
- TRAXLER, A. E. "Measurement in the Field of Personality," Education 66: 424-430, March, 1946
- VERNON, P. E. "Can Total Personality be Studied Objectively?"

 Character and Personality, Vol. II, No. 4, 1935-36
- WATSON, G. "Character and Personality Tests," Psychological Bulletin Vol. XXX, 1933, Pp. 467-487
- WATSON, G. "Next Steps in Personality Measurement," Character and Personality, Vol. II, September, 1933, Pp. 66-73
- WATSON, G. "The Specific Techniques of Investigation: Testing Intelligence, Aptitudes, and Personality" The Scientific Movement in Education, Thirty-Seventy Yearbook of the National Society for the Study of Education, Part II, Chapter XXX, Pp. 357-373, Bloomington, Illinois Public Publishing Company, 1938

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